

AN
INTRODUCTION
TO
BOTANY.
CONTAINING
AN EXPLANATION
OF THE
THEORY OF THAT SCIENCE,
EXTRACTED FROM THE
WORKS OF LINNÆUS;

WITH
AN APPENDIX;
K. Linnæus (C.) and afterwards Linné (C. var.)
GLOSSARY.

THE SIXTH EDITION,
MUCH IMPROVED AND ENLARGED.

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ADVERTISEMENT.

IT is incumbent on the Publisher to shew in what respects the present Edition has a better claim to public favour than any of the former.

Every edition of this Work, for these last thirty years, has been servilely copied from the 2d edition; notwithstanding the great improvement which the Science of Botany has received during that period by the accession of new Genera, and the different arrangement of the Orders, in every Class, and their Sub-divisions. These in this Edition have been carefully attended to, and, it is hoped, accurately inserted.

In the Appendix instead of the Generic name only, the trivial name in many of the Species has been added, and a great number of new English names, chiefly of West India Plants given, for which the Editor is indebted to a very eminent Botanist. A few errors that had maintained their places in all the former Editions, have also been carefully corrected, and some improvements occasionally introduced into the Text, which it would be tedious to specify here.

ADVERTISING

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P R E F A C E.

THOUGH the Study of Botany is of late Years become a very general Amusement in this Country, there has yet appeared no Work, in our own Language, that professedly treats of the Elements of that Science; it is therefore hoped, that what is now offered to the Public, if it shall appear to have been carefully executed, will be considered as a performance of some Utility. The Matter it contains, or at least the far greater part of it, will probably be new to the English Reader, for though some few explanations of the samekind may be found interspersed in larger works, these are for the most part too costly to fall into many hands; nor could the Reader expect to find therein the whole of what he seeks, the explaining the Theory of the Science not having been the immediate object of those Publications.

The Matter of the following sheets has been collected from the Works of the celebrated Dr Linnæus; whose labours for the reformation of this Science in general, and whose Invention of the Sexual System in particular, are well known. As the Writings of this learned Professor are interspersed with philosophical and critical remarks that are of less general Use, it was thought that a direct translation of any of his Works would not be so well received, as what is now given; which contains an Extract of his most material

Doctrines.

Doctrines. The method in which these have been distributed in the following Chapters, we propose to explain ; but to render this more intelligible, it will be expedient to lay before the Reader a short account of those discoveries that have given occasion to the moulding of this Science into a form so different from that in which it appeared in the last century.

The Sexual System of Botany, as its title imports is founded on a discovery that there is in Vegetables, as well as in Animals, a distinction of the Sexes. This was not wholly unknown to the Ancients ; but their knowledge of it was very imperfect. In order to shew in what respect this discovery has been investigated farther by the moderns, it will be necessary to anticipate part of the subject-matter of the following Chapters.

It will be seen in the course of this Work, that the Flowers of the generality of Vegetables are Hermaphrodite, containing within them the characters of both Sexes ; but that in the Classes Monoecia and Dioecia, the Sexes are parted, and allotted to different Flowers ; and that in the class Dioecia in particular, the Sexes are even on different plants, the male Flowers growing all upon one plant, and the female upon another. Now this last circumstance the Ancients had observed : indeed it could hardly escape their notice ; for the Palm-tree, whose fruit was in esteem, being of the class Dioecia, a very little observation was requisite to teach them, that in these trees the flowers of the male were necessary to ripen the fruit of the female. Accordingly we find, in the account given by Herodotus* of the country about Babylon, where these trees are in plenty, that it was a custom with the Natives in their culture of this plant, to assist the operations of Nature, by gathering the flowers of the male trees, and carrying them to the female. By this means they secured the ripening of the

* Book the First.

the fruit; which might else, from unfavourable seasons, or the want of a proper intermixture of the trees of each sex, have been precarious, or at least not to have been expected in equal quantities.

It seems pretty extraordinary, that this discovery should not have led the Ancients to detect the whole process of Nature in the propagation of the various Species of Vegetables; and yet it does not appear, by any of their writings that are come down to us, that they went farther than this obvious remark upon the Palm-tree, and some similar notions concerning the Fig. They had indeed, from what they saw in these Plants formed a notion that all others were male and female likewise*; but this notion was false, the far greater part having hermaphrodite flowers, which serves to convince us, that what they discovered of the Palm and Fig, was only a right guess, and not founded on any knowledge of the Anatomy of flowers, either in those trees, or any others.

In this dark state the doctrine of the Sexes of Vegetables remained, not only through all the ages of antiquity, but almost to the end of the last century, the moderns seeing no more of this doctrine than the Ancients had done before them; and hence we have to this very hour in use the false distinctions of male and female species of Cornus, Pæony, Cistus, and many others, which have all hermaphrodite flowers, the distinction in these cases being grounded on nothing more than some difference in the habit of the two species with which the Sexes are no ways concerned.

The

* Thus Theophrastus;

“ In Trees, considered universally, and taking in each several kind, there are, as has been said, many differences. One of these is common to them all, namely, that by which they are distinguished into female and male, of which the one bears fruit, the other not, in some kinds; in those in which both bear fruit, that of the female is the best, unless these are to be called Males, for so they are called by some.”

Hist. Pl. Book III. Chap. 9.

The honour of having first suggested the true sexual distinctions in Plants appears to be due to our own countryman, Sir Thomas Millington; from whose hints Doctor Grew, as the Doctor himself acknowledges, was led to the observations he has given on this subject, in his *Anatomy of Plants**. After this, Camerarius, Moreland, Geoffroy, Vaillant, Blair, Jussieu, and Bradley, pursued their enquiries and experiments so far as to remove all doubt concerning these discoveries; and lastly, Doctor Linnæus founded thereon the System of Botany which we are going to explain in this Work.

The Sexual Hypothesis, on its first appearance, was received with all that caution that becomes an enlightened age; and Nature was traced experimentally through all her variations, before it was universally assented to. Tournefort refused to give it any place in his system; and Pontedera, though he had examined it, treated it as chimerical; but the proofs which Dr. Linnæus has stated amongst the aphorisms of his *Fundamenta Botanica*†, and farther explained and illustrated in his *Philosophia Botanica*†, are so clear that the birth of animals is not more evidently the consequence of an intercourse between the Sexes, than that of Vegetables; and it would be now as ridiculous for any one, who has looked at the arguments, to doubt of the one as of the other.

We

* Published in the Year 1682. The Doctor expresses himself thus:—"In discourse hereof with our learned Savilian professor, Sir Thomas Millington, he told me, he conceived that the attire doth serve as the Male, for the generation of the Seed. I immediately replied, that I was of the same opinion and gave him some reasons for it, and answered some objections which might oppose them, *See Anat. of Plants*, p. 171.

† Aphorism 132 to 150.

‡ Page 86 to 96.

We shall not attempt to lay all these proofs before the Reader ; our business is to explain, not to demonstrate ; but as it may be satisfactory to see some one fact established, that carries conviction with it, we shall here give an extract of a letter from Berlin, inserted in the *Philosophical Transactions**, concerning a remarkable experiment made on the Palm-tree.

Extract of Mr Mylius's letter to Mr Watson, dated at Berlin, Feb. 20. 1750—51.

“ The Sex of Plants is very well confirmed, by an
 “ experiment that has been made here on the *Palma*
 “ *major foliis flabelliformibus*. There is a great
 “ tree of this kind in the garden of the Royal Aca-
 “ demy. It has flowered and bore fruit these thirty
 “ years, but the fruit never ripened, and when plant-
 “ ed, it did not vegetate. The palm-tree as you
 “ know, is a *Planta Dioecia*, that is, one of those in
 “ which the male and female parts of Generation
 “ are upon different plants. We having therefore
 “ no male Plants, the flowers of our female were ne-
 “ ver impregnated by the farina of the male. There
 “ is a male plant of this kind in a garden at Leipzig,
 “ twenty German miles from Berlin. We procured
 “ from thence, in April 1749, a branch of male
 “ flowers, and suspended it over our female ones,
 “ and our experiment succeeded so well, that our
 “ Palm-tree produced more than an hundred perfect-
 “ ly ripe fruit ; from which we have already eleven
 “ young palm-trees. This experiment was repeated
 “ last year, and our palm-tree bore above two thou-
 “ sand ripe fruit. As I do not remember a like ex-
 “ periment, I thought it convenient to mention it to
 “ you ; and if you think proper, be pleased to com-
 “ municate it to the Royal Society.”

b

This

* Vol. xlvii. page. 169.

This letter, which was read to the Society the 2d of May, 1751, with some ingenious observations on the same subject, by Dr. Watſon, F. R. S. to whom it was addreſſed*, has eſtabliſhed the fact, atteſted by the Ancients, concerning the palm-tree, which ſome may perhaps have looked upon as fabulous; and as the fructification in other Vegetables, though it may differ in particular circumſtances, has yet in general a manifeſt conformity with that of the palm-tree, in reſpect to the parts ſuppoſed to be the organs of Generation, which are diſcoverable either on the ſame, or on a ſeparate flower, in all but the claſs Cryptogamia, where they are too minute for obſervation; ſo from this ſingle experiment we may fairly draw an argument by analogy, for the confirmation of the whole Sexual Hypotheſis: but there are, as has been ſaid, other, and better proofs. We have already directed the reader to thoſe ſtated by Linnæus; whoever deſires farther ſatisfaction concerning this Point, may ſee the ſeveral demonſtrations collected, and methodically connected in the *Sponſalia Plantarum* of J. Guſtavus Walkbloom, published in the *Amoenitates Academicæ* at Leyden, in 1749.

Having thus explained, as far as ſeems neceſſary, the new principles upon which the reformation of the former vicious ſyſtems of Botany has been undertaken by the later Botanists, we come to ſhew, as we propoſed, the method that has been followed in this Introduction to the Science.

The work is divided into three parts, and each part into ſundry chapters. The ſubject of each chapter may be ſeen in the table of Contents prefixed to the work; but with reſpect to the three parts, as no title or head explanatory of the matter each contains could be conveniently prefixed to them, it will be proper to explain here the Scope of this Diviſion.

Vegetables,

* Printed alſo in the *Philophical Tranſactions* with the Letter.

Vegetables, according to Linnæus, are primarily divisible into three parts. 1. The Root, 2. The Herb or Plant itself. 3. The Fructification. And in this order these parts might have been treated, were it not on account of the Sexual System; but as the explanation of the latter was the principal object of this Work, it became necessary to give up the order of the Parts of the Vegetable; and follow that of the system.

The System is divided, 1. into Classes. 2. Orders. 3. Genera. 4. Species. 5. Varieties. Now as the Classes, Orders; and Genera, which come first in the System, are established on the Fructification alone, it became necessary to give this part of the Vegetable the preference in point of Order; and we have accordingly made the Fructification the Subject of the several Chapters of the first part of this Work.

In the second Part, we have given a full explanation of the Classes, Orders, and Genera of the System; which indeed contain the whole Theoretic Part of it, the Doctrines of Species and Varieties having, as Linnæus observes, a nearer Relation to the Practice. The reason for proceeding to the system immediately after the Fructification is manifest: as the Theory of the System is established on the Fructification alone, an account of the latter was all that was necessary to prepare the Reader for understanding the explanation of the former, which, as has been said, was the principal object of the Work.

In the third and last Part, the two remaining Parts of the Vegetable, *viz.* the Root and Herb, are treated of: and as these chiefly furnish the Doctrines that respect the two last divisions of the System, *viz.* Species, and Varieties, so these Doctrines are also included in this third Part, and make the conclusion of the Work.

The two Tables subjoined to the Work, have their explanations prefixed ; and we shall only speak here of their Utility. It is presumed that no exact Table of the Linnæan Genera with their English Names, and a Reference to their Classes and Orders, as given in the first Table, has yet appeared in Print, our Writers not having adopted all the Linnæan Names, nor followed that Author exactly in his Distribution of Vegetables ; our first Table, therefore cannot but be of great Use to those who are desirous of becoming acquainted with the method of Linnæus, and of framing the Lists of their private Collections upon the Plan of his System.

The Utility of the second Table, which contains the Names of the Genera rejected by Linnæus, is obvious ; it might have been augmented to ten Times it's Bulk, had all the Names been inserted that have been given to Vegetables by the numerous Writers on this Science ; but such a Collection would be a Work of itself ; and it has been therefore thought advisable to confine it to those only that are cited in the Genera Plantarum of Linnæus, which contains the principal.

The Table of English Specific and Generic Names referred to their Linnæan Titles, which is given in the Appendix, has been executed with care ; and in the present Edition considerably enlarged not only with the trivial names, but with a very great number of new Generic and Specific Names, chiefly of West India Plants, with which the Editor of the present edition was favoured by a very eminent Botanist. If nevertheless any mistakes or material Omissions should appear, those who are versed in Botany will be the most ready to excuse them.

The Designs for the Figures of the Plates are for the most part taken from those given by Linnæus in his Works. Some of them might, perhaps, have been mended by fresh designs from Nature ; but as the

the Work here given to the public is professedly an extract of the Linnæan Doctrines, it was thought that the Figures he had himself selected would, upon the whole, come the nearest to his own meaning, and be of the greatest Help in explaining it.

The Glossary, which is an Addition to this Work, contains many new Terms of Art, not in the former Editions, collected from the Works of Doctor Linnæus, that have been published since the INTRODUCTION to BOTANY made its first appearance.

There is likewise added to this Edition a Systematic Arrangement and Explanation of Botanic Terms.

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INTRODUCTION

TO

BOTANY.

PART THE FIRST.

CHAP. I.

Of the Seven Parts of FRUCTIFICATION.

BY Fructification we are to understand both the *flower* and *fruit* of plants; which cannot well be separated: For though the fruit does not swell and ripen till after the flower is fallen, its rudiment, or first beginning, is in the flower, of which it properly makes a part. Linnæus defines the fructification to be a temporary part of vegetables, allotted to generation, terminating the old vegetable, and beginning the new. It consists of seven principal parts, viz.

1. The CALYX, Empalement, or Flower-cup.
2. The COROLLA, or Petals, vulgarly called the leaves of the flower.
3. The STAMINA, Threads, vulgarly called, the Chives.
4. The PISTILLUM, Pointal.

A

5. The

5. The PERICARPIUM, Seed-vessel.
6. The SEMINA, Seeds themselves.
7. The RECEPTACLE, Base, on which the fructification is seated.

All these parts, and their several uses, will be particularly explained in the following chapters; and it is sufficient to observe here, that the four first, viz. Calyx *, Corolla, Stamina, and Pistillum, are properly parts of the *flower*; and the three last, Pericarpium, Semina, and Receptacle, parts of the *fruit*; and that it is from the number, proportion, position, and other circumstances attending these parts of fructification, that the classes of vegetables, and the Genera they contain, are to be characterized according to the sexual system.

CHAP. II.

Of the CALYX.

THE CALYX is the termination of the *Cortex*, or outer bark of the plant; which after accompanying the trunk or stem through all its branches, breaks out with the flower, and is present in the fructification in this new form. Its chief use is to enclose and protect the other parts. It has received different appellations, according to the circumstances with which it is attended, viz.

PERIANTHIUM, a Flower-cup, when its station is close to the fructification. If it includes the stamina, and not the germen, it is the perianthium of the flower; if the germen, but not the stamina, the perianthium

* That the Calyx is a part of the flower, though it often attends the fruit, is manifest from hence; that there is no instance of its coming out after the plant has done flowering, although in the Patagonula the Calyx is observed to grow to a much larger size in the fruit than it did in the flower.

anthium of the fruit; but if it includes both, it is the perianthium of the fructification.

INVOLUCRUM, a Cover, when stationed at the foot of an umbel, at a distance from the flower; it is an universal involucrum, if it is under the universal umbel; or a partial one, if under a partial umbel.

AMENTUM, Catkin, when it proceeds from one common receptacle, resembling the chaff of an ear of corn.

SPATHA, Sheath, when it bursts lengthways, and puts forth a *Spadix* *.

GLUME, Hulk, in grasses, which it folds over with its valves; and the sharp point or beard issuing from the glume is called an Arista,

CALYPTRA, a Veil, in mosses, where it is placed over the *antheræ*, tops of the stamina, and is hooded like a monk's cawl.

VOLVA, from its involving or enfolding, in the *fungi*, or mushroom-tribe, where it is membranaceous, and rent on all sides.

It is sometimes difficult to distinguish a Calyx from a *Bractea*, floral leaf †, such as is found to accompany the fructification of the *Tilia*, *Lavandula*, *Melampyrum*, and others. They may be distinguished by this certain rule, that a Calyx always withers when the fruit is ripe, if not before; but the *Bractea* will

A 2

remain

* *Spadix* properly signifies the receptacle of a palm: see Chap. viii. But *Spatha* is not confined only to such plants as have a *Spadix* in this sense of the term, but is applied to *Narcissus*, *Galanthus*, *Pancratium*, and many others, whose flower-stalks come out of a sheath. *Spadix* therefore is here to be understood in a more general sense: agreeable to such latitude we shall find it used in Chap. xix. under the head of *spadiceous aggregate flowers*, to express the common receptacle in *Calla*, *Dracontium*, *Pothos*, *Arum*, and *Zostera*, as well as in the palms.

† In many plants there are found green leaves amongst the flowers, that differ in shape from the ordinary leaves of the plant. These are the *Bractea*, or floral leaves here spoken of. They are commonly situated on the flower-stalks, and sometimes so near the flower, as to be mistaken for its Calyx.

AN INTRODUCTION

remain longer. Without attending to this, mistakes might easily be made in Helleborus, Nigella, Passiflora, Hepatica, Peganum, and others, in which the Calyx is wanting. The distinction between a Calyx and Corolla in doubtful cases will be treated of in the next chapter. In many flowers the Calyx is deciduous, dropping off the instant the flower begins to expand; this is the case with Epimedium and Papaver.

C H A P. III.

Of the COROLLA.

THE COROLLA, is the termination of the *Liber*, or inner bark, continued to, and accompanying the fructification in this new form of painted leaves. Its use is the same as that of the Calyx, serving as an inner work of defence for the parts it encloses, as the Calyx, which is usually of stronger texture, does for an outer one.

The leaves of which the Corolla consists are called *Petals*; by which appellation they are conveniently distinguished from the green leaves of the plant with which they might else be confounded *. The Petal is

* *Petal* (in the Greek *ανταλον*) signifies leaves in general; but there being another Greek word (*φυλλον*) nearly of the same signification, the modern Botanists have borrowed the former to express the leaves of the flower. The ancients seem to have had no distinct term in use to express this part of the fructification. Thus Virgil, in describing his *Amellus*, which is a species of *Aster*, the flower of which has a yellow middle, and purple rays, calls it a golden flower, surrounded with purple leaves.

*Aureus ipse (Flos) sed in foliis, quæ plurima circum
Funduntur, violæ subluceat purpura nigræ.* GEORG. IV.

This loose expression, which is chargeable rather on the language than the poet, has misled all its translators; as is rightly

is defined by Linnæus as a corollaceous covering to the flower, meaning that it encloses and protects it in the manner of a Corolla, or Wreath. If the Corolla be

MONOPETALOUS, of one Petal, it consists of two parts, viz. the *Tube*, or lower part, which is usually tube-shaped; and the *Limb*, or upper part, which usually spreads wider. And the limb again, according to its figure, is either *Campanulate*, bell-shaped, that is bellying-out, and without a tube; *Infundibuliform*, funnel-shaped, that is, of the figure of a cone, and standing on a tube; *Hypocrateriform*, salver-shaped, that is, plain or flat, and standing on a tube; *Rotato plane*, wheel-shaped and flat, without a tube; or *Ringent*, gaping, that is, irregular and perforated with two lips. But if the Corolla be

POLYPETALOUS, of many Petals each Petal consists of *Unguis*, a claw, which is the lower part fastened to the base; and *Lamina*, a thin plate, which is the upper part,

rightly observed by Martyn, in his note on this passage. May and Addison make the real leaves of the plant purple:

For from one root he spreads a wood of boughs,
Whose many LEAVES, altho' the flower be gold,
Black violets dimme purple color hold. MAY.

The flower itself is of a golden hue,
The LEAVES inclining to a darker blue.
The LEAVES shoot thick about the root, and grow
Into a bush; and shade the turf below. ADDISON.

DAYDEN applies the same color to the boughs:

For from one root the rising stem bestows
A wood of leaves, and violet purple BOUGHS.
The flower itself is glorious to behold,
And shines on altars like refulgent gold. DRYDEN.

Dr. TRAPP applies the golden color to the stem, and the purple to the leaves:

For from one turf a mighty grove it bears;
Its STEM of golden hue; but in its LEAVES,
Which copious round it sprout, the purple teint
Of deep-dyed violets more glossy shines.

part, and usually spreading. A polypetalous Corolla is *cruciform*, cross-shaped, when it consists of four Petals that are equal and spreading; and *papilionaceous*, butterfly-shaped, when it is irregular, consisting of four Petals, of which the under one resembles the keel of a ship, the upper one rises, and the two side ones stand single.

There belongs also to the Corolla a part called the *Nectarium*, which has been but newly distinguished, having been by former Botanists confounded with the Petals. It is by Linnæus defined to be the part which bears the honey, and belonging to the flower only. This part affords a wonderful variety in the manner of its appearance. In some plants it is very large, as in the Narcissus and Aquilegia; in the former of which the cup, and in the latter the horns, are *Nectarria*: in others it is scarce discoverable, even with glasses. In some plants it is united with, and makes part of the Petals: in others it is detached from them. Its shape and situation are also as various. Its use is not known, unless the supposition of its secreting the honey may be depended upon.

Between the Calyx and Corolla, nature has put no absolute limits; as is plain from the Daphnis, in which plant they grow together, and are united in the margin, like a leaf of the Buxus; but they may be commonly distinguished by their position in respect of the stamina, the petals and stamina being ranged alternately; whereas the segments of the Calyx, and the stamina, answer to each other. That this is their natural situation, appears from the complete flowers in the classes Tetrandria and Pentandria: And the use of applying this rule will be found in the instances of Chenopodium, Urtica, and Parietaria; where it decides, that the single cover in those Genera is a perianthium, and that it is the Corolla that is wanting. Should we infer, where only one of the two covers appears, that it is a Corolla, because that is a more principal part, there would be no certainty from such an inference; as is evident from
the

the *Ammannia*, *Isnarda*, *Peplis*, *Ruellia*, and *Campanula*, in all which the Corolla is often found wanting, but not the Calyx.

That the Calyx, as proceeding from the Cortex of the plant, is coarser and thicker than the Corolla, which is produced by the soft, pliant, coloured Liber, is obvious to every one. But there are no limits determinable from any such circumstances, unless it be from the color; and even this is not sufficient; for the perianthium of the *Bartisia* is blood-colored; and there are also many flowers whose corollæ are colored, naked, and subject to lose their petals when in the state of flowering, but which afterwards harden and turn green, and remain on the plant like a calyx; as for instance, the *Helleborus* and *Ornithogalum*.

The *Euphorbia* has deceived many, who have described it as monopetalous, taking the calyx for the Corolla. But that the *Pelta*, as they are called, upon the leaves of the *Lichen*, are really the petals of the flower, is proved by some annual species, in India, in which there are white petals very distinguishable.

CHAP. IV.

Of the STAMINA.

THE STAMINA are the male part of the flower. Linnæus defines them as an entrail of the plant, designed for the preparation of the *pollen*; of which we shall speak presently.

Each single *stamen* consists of two parts, viz.

1. *FILAMENTUM*, the filament or thread; which serves to elevate the *anthera*, or summit, and at the same time connects it with the flower.

2. *ANTHERA*, the summit itself; which contains within

within it the pollen, and when come to maturity discharges the same.

The POLLEN, Meal, contained within the antheræ, is a fine dust secreted therein, and destined for the impregnation of the germen; of which part we shall speak in the next chapter.

The Stamina being, as I have said, the male part of the flower, the construction and distribution of the sexual system is principally founded upon, and regulated by it; as will appear in the explanation of the system. It is sufficient to observe here, that such flowers as want this part are called *female*; such as have it, but want the female part described in the next chapter, *male*; such as have them both, *hermaphrodite*; and such as have neither, *neuter*.

CH A P. V.

Of the PISTILLUM.

THE PISTILLUM is the female part of the flower: It is defined by Linnæus as an entrail of the plant, designed for the reception of the pollen. It consists of three parts.

1. The GERMEN; which is the rudiment of the fruit accompanying the flower, but not yet arrived at maturity.

2. The STYLE, which is the part that serves to elevate the Stigma from the Germen.

3. The STIGMA; which is the summit of the Pistillum, and covered with a moisture for the breaking of the pollen.

It has been said in the last chapter, that the pollen was destined to the impregnation of the germen: this is performed in the following manner. The Antheræ, which at the first opening of the flower are whole, burst open soon after, and discharge the pollen; which

which dispersing itself about the flower, part of it lodges on the surface of the stigma, where it is detained by the moisture with which that part is covered; and each single grain or atom of the pollen bursting and dissolving in this liquor, as it has been observed to do by the Microscope, is supposed to discharge something that impregnates the germen below. What the substance is that is so discharged, and whether it actually passes through the style into the germen, seems yet undetermined, it being difficult to observe such minute parts; but whatever be the operation by which nature produces the effect in question, the cause, as far as it has been here explained, is scarce disputable; and accordingly we see, that after this impregnation, when the parts of the flower that have done their office are fallen away, the Germen swells to a fruit big with seeds, by which the species is propagated. The pistillum being, as I have said, the female part of the flower, is of great consequence in the sexual system, as well as the male part; as will appear when the system comes to be explained.

C H A P. VI.

Of the PERICARPIUM.

THE PERICARPIUM, Seed-vessel, is the Germen described in the last chapter grown to maturity. It is defined by Linnæus as an entrail of the plant big with seeds, which it discharges when ripe.

It is distinguished, according to the circumstances that attend it, by the following appellations.

CAPSULA, a Capsule, is a hollow pericarpium, which cleaves or parts in some determinate manner. The inclosure of the capsule, which surrounds and covers the fruit externally, is called a *valvule*; the
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partitions;

partitions, which divide the capsule into sundry compartments or cells, *dissepiments*; the substance which passes through the capsule, and connects the several partitions and seeds, *columella*; and the cells or hollow compartments of the capsule in which the seeds are lodged, *loculaments*.

SILIQUA, a Pod, is a pericarpium of two valves, wherein the seeds are fastened along both the futures or joinings of the valves.

LEGUMEN, a Pod also, is a pericarpium of two valves, wherein the seeds are fastened along one future only.

FOLLICULUS, formerly CONCEPTACULUM, a Conceptacle, is a pericarpium of a single valve, which opens on one side lengthways, and has not the seeds fastened to it.

DRUPA, is a fleshy or pulpy pericarpium without valve, containing a stone.

POMUM, is a fleshy or pulpy pericarpium without valve, containing a capsule.

BACCA, a Berry, is a fleshy or pulpy pericarpium without valve, the seeds within which have no other covering.

STROBILUS, is a pericarpium formed of an Amentum, (See Chap. 2d.)

CH A P. VII.

Of the SEEDS.

THE SEED, according to the definition of Linnaeus, is a deciduous part of the vegetable, the rudiment of a new one, quickened for vegetation by the sprinkling of the pollen. Its distinctions are,

A SEED, properly so called, which is a rudiment of a new vegetable, furnished with sap, and covered with a bladdery coat or tunic. It consists of, 1. *Cosculum,*

culum, the first principle of the new plant within the seed. 2. *Plumula*, a scaly part of the corculum; which ascends. 3. *Rostellum*, a plain part of the Corculum; which descends. 4. *Cotyledon*, a side lobe of the seed, of a porous substance, and perishable. 5. *Hilum*, an external mark or scar on the seed, where it was fastened within the fruit. 6. *Arillus*, the proper exterior coat or tunic of the seed; which comes off of itself. 7. *Coronula*, the little crown of a seed; which is either *Calyculus*, the calyx of a floret, adhering to the seed, and assisting it to fly; or *Pappus*, a Down, which is a feathery or hairy crown answering the same end, and connected with the seed by *Stipes*, a trunk, which here signifies the thread on which the down is raised and supported. 8. *Ala*, Wing, a membrane affixed to the seed, and which, by its flying, helps to disperse it.

Nux, a Nut; which is a seed inclosed with an osseous epidermis, a bony or hard outer skin, commonly called the *shell*.

PROPAGO; which is the seed of a moss, first discovered by Linnæus, who peeled off the bark, and detected it in the year 1750. These seeds have neither tunic nor cotyledon, but consist only of the plumula of a naked corculum, where the rostellum is inserted into the calyx of the plant.

C H A P. VIII.

Of the RECEPTACLE.

THE RECEPTACLE, is the base which connects the other six parts of a single fructification. Its various appellations are as follows.

A PROPER RECEPTACLE, is that which belongs only to the parts of a single fructification: And this is called a *receptacle of the fructification*, when it is

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common

common to both flower and fruit ; *a receptacle of the flower*, when it is a base to which the parts of the flower only are fastened without the germen ; *a receptacle of the fruit*, when it is a base for the fruit only, remote from the receptacle of the flower ; *a receptacle of the seeds*, when it is a base that fastens the seeds within the pericarpium.

A COMMON RECEPTACLE, is that which connects many florets in such a manner, as that the taking away any of them would cause an irregularity. *Palea*, a chaff, is a thin substance, springing from the receptacle to part the florets.

UMBELLA, an Umbell, is a receptacle, which, from a common center, runs out into thread-shaped footstalks of proportionate lengths. It is called a *simple umbel*, when it has no subdivisions ; a *compound umbel*, when each footstalk is terminated by an *umbellula*, or *little umbel* ; and in this case, the umbel that bears the umbellula on its footstalks, is called an *universal umbel* : and the umbellula which proceeds from the universal umbel, a *partial umbel*.

CYMA, a Cyme, is a receptacle that runs into long fastigate peduncles *, proceeding from the same universal center ; but with irregular partial ones.

SPADIX, is the receptacle of a palm †, produced within a spatha, or sheath, on the branches that bear fruit.

* *Peduncles*, Flower-stalks, are called Fastigate, when their lengths are so proportioned, that the flowers which they support form an even surface.

† This is the proper sense of the term, as employed by the ancients : But Spadix is now used in a more general sense, viz. to express all Flower-stalks that come out of a Spatha ; see the Note on this subject in Chap. 2. This definition therefore appears to be too strict.

C H A P. IX.

Of the distinct Characters of the Parts of FRUCTIFICATION.

THE parts of Fructification, with their subdivisions, having been explained separately in the preceding chapters, we shall here give a view of them altogether, with the proper distinguishing character assigned to each by Linnæus, beginning with the vegetable itself.

The essence of the vegetable consists in its *Fructification*: The essence of the fructification consists in the *Flower* and *Fruit*: The essence of the flower consists in the *Anthera* and *Stigma*: The essence of the fruit consists in the *Seeds*. We come now to THE PARTS.

POLLEN, is a dust of vegetables, designed to burst in a liquor appropriated to that purpose; and discharge therein, by its elastic force, a substance not distinguishable by the naked eye.

A SEED, is a deciduous part of a plant, fraught with the rudiment of a new plant, and quickened by the pollen.

ANTHERA, is a vessel that produces and discharges the pollen.

PERICARPIUM, is a vessel that produces and discharges the seeds.

FILAMENTUM, is the foot that supports the Anthera, and fastens it to the vegetable.

GERMEN, is the rudiment of the Pericarpium or of the Semen, not yet arrived at maturity; its existence is chiefly at the time when the Anthera is discharging its pollen.

STIGMA, is the moistened summit of the Germen.

STYLUS, is the foot of the Stigma, that connects it with the Germen.

COROLLA and **CALYX**, are the teguments or covers of the stamina and pistillum; the Calyx arising from the *cortical Epidermis*, or outer bark, and the Corolla from the *Liber*, or inner bark.

RECEPTACULUM, is that part which connects the parts before-mentioned.

From these characters the following principles may be deduced.

1. That every vegetable is furnished with flower and fruit; there being no species where these are wanting.

2. That there is no fructification without anthera, stigma, and seed.

3. That the antheræ and stigma constitute a flower, whether the covers are present or wanting.

4. That the seed constitutes a fruit, whether there be a pericarpium or not.

In respect to the seed; its essence consists in the Corculum, which is fastened to the Cotyledon, and involved therein and closely covered with its proper tunic.

The essence of the Corculum consists in the Plumula; which is the vital speck of the plant itself, extremely small in its dimensions, but increasing like a bud to infinity. The Rostellum however must be included, being the base of the plumula, which descends and strikes root, being the part originally contiguous to the mother plant.

That the Propagines, or seeds of mosses, consist only of the Plumula and Rostellum, has been already shewn. (See Chap. 7)

C H A P. X.

Of THE MOST NATURAL STRUCTURE of the Parts
of FRUCTIFICATION.

IN considering the structure of the parts of Fructification, the principal objects to be attended to are, 1. The *number* of each part. 2. Its *figure*. 3. Its *proportion*; by which is to be understood its height in respect to the rest; and 4. Its *situation*; which will include also its *inserterion* and *connections*. As to any other differences, such as a difference in the size, colour, smell, or taste, it is not safe to allow any weight to them, as they might lead us to make distinctions, not justifiable by the true principles of the science.

As the number, figure, proportion, and situation of the parts are variable, we shall consider; 1. The most natural Structure, or that which most frequently occurs; and this we shall make the subject of the present chapter. 2. The Differences in structure, arising from the variation of the parts in different plants; which will take up a few of the succeeding chapters. And, 3. The singular Structures, or such as are observed in a few genera only; for which we shall allot a chapter by itself.

The most natural Structure of the parts in respect to Number, is, to have the calyx divided into as many segments as the corolla; the filaments equal in number to the segments of the corolla and calyx; a single anthera on each filament; the divisions of the pistillum equal in number to the cells of the pericarpium, or the receptacles of the seeds; the most common number, *five*; (whence the extent of the classes *pentandria* and *syngenesia*,) and the corolla and calyx also *quinquifid*, cut into five segments.

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In respect to Figure, to have the calyx less spreading than the corolla; the corolla widening gradually; the stamina and pistillum upright and tapering; the pericarpium big with seeds, swelling and extending after the rest of the parts (the calyx excepted) are fallen off.

In respect to Proportion, to have the calyx less than the corolla; the pistillum of equal length with the stamina in an upright flower, but longer in an inverted one; if the flower slope downward, the stamina and pistillum inclining towards the under side; but if it slope upwards, placed close under the upper side.

In respect to Situation, to have the perianthium surrounding the receptacle; the corolla placed on the receptacle, and alternate with the perianthium; the filaments placed within the corolla, but corresponding with the perianthium; the antheræ seated on the tops of the filaments; the germen possessing the centre of the receptacle; the style standing on the top of the germen; the stigma seated on the top of the style. When the stigma and style are fallen, the germen grows to a pericarpium, supported by the calyx, and including the seeds which are affixed to the receptacle of the fruit. The receptacle of the flower is generally under the pericarpium, being not so often found to grow either round it or over it.

C H A P. XI.

Of the different structures of the CALYX.

HAVING shewn the most natural structure of the parts of the fructification in the last chapter, we come now to their Differences, or variations, (which

(which are the foundation of the genera) and their characters; and of these we shall treat in their order, beginning with the *Calyx*.

The variations of the *Calyx*, in respect to *Number*, will take in the terms also that respect its *Composition*, *Parts* and *Segments*.

In respect to *Number*, it is either *single*, as in *Primula*, and most flowers; *double* as in *Malva*, *Hibiscus*, and *Bixa*; or *wanting*, as in *Tulipa*, *Fritillaria*, and many of the liliaceous flowers.

In respect to *Composition*, it is either *imbricate*, that is, composed of various scales lying over each other, as in *Hieracium*, *Sonchus*, and *Camellia*; *squarrose*, that is, composed of scales divaricated on all sides; and spreading widely open, as in *Carduus*, *Onopordum*, and *Conyza*; *auctus*, augmented; that is, having a series of distinct leaves, shorter than its own; that surround its base externally, as in *Coreopsis*, *Blends*, *Crepis* and *Dianthus*; or *multiflorus*, many flowered, that is, common to many florets, as in *Scabiosa*, and in the plants of the class *Syngenesia*.

In respect to its *parts*, it is either *monophyllous*, of one leaf, as in *Datura* and *Primula*; *diphyllous*, of two, as in *Fumaria*, and *Fumaria bulbosa*; *triphyllous* of three, as in *Tradescantia*; *tetraphyllous*, of four, as in *Sagina*, *Epimedium*, and in the plants of the class *Tetradynamia*; *pentaphyllous*, of five, as in *Cistus*, *Adonis* and *Cerbera*; *hexaphyllous*, of six, as in *Berberis*; or *decaphyllous*, of ten, as in *Hibiscus*.

In respect to its *segments* (which chiefly concern the monophyllous *Calyx*) it is either *integer*, whole, as in *Genipa*; *bifid*, divided in two Segments, as in *Utricularia*; *trifid*, in three, as in *Alisma*, and *Cliffortia*; *quadrisid*, in four, as in *Rhinanthus*; *quinquisid* in five, as in *Nicotiana*; *sexsid*, in six, as in *Pavia*; *octosid* in eight, as in *Tormentilla*; *decemsid*, in ten, as in *Potentilla* and *Fragaria*; or *duodecemsid*, in twelve, as in *Lythrum*.

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The variations of the Calyx in respect to figure will also include the terms respecting its *Equality*, *Margin* and *Apex*, or *Top*.

In respect to *Figure*, it is either *globose*, globe-shaped as in *Cucubalus*; *clavate*, club-shaped, as in *Silene*; *reflex*, bent back, as in *Asclepias*; or *erect*, upright, as in *Primula* and *Nicotiana*.

In respect to *Equality*, it is either *equal*, as in *Lychnis*; *unequal*, as in *Helianthemum*; or with the segments *alternately shorter*, as in *Tormentilla* and *Potentilla*.

In respect to its *Margin*, it is either *integerrimus*, very entire, as in most plants; *serrate*, sawed, as in some species of *Hypericum*; or *ciliate*, fringed with hairs like an eye-lash, as in some species of *Centaurea*.

In respect to its *Apex*, or *top*, it is either *acute*, sharp, as in *Primula* and *Androface*; *acuminate*, pointed, as in *Hyoscyamus*; *obuse*, blunt, as in *Nymphaea* and *Garcinia*; or with one of its indents *lopped off*, as in *Verbeña*.

In respect to *Proportion*, it is either *longer* than the *Corolla*, as in *Agrostemma*, *Sagina*, and some species of *Antirrhinum*; *equal* to it, as in some species of *Cerastium*; or *shorter*, as in *Silene*.

In respect to *Situation*, it is either a *Calyx* of the *flower*, as in *Linnæa* and *Morina*; of the *fruit*, as in *Linnæa* and *Morina**, or of the *Fruetification*, as in *Pæonia*.

The *Duration* of the *Calyx* may also be considered. In respect to which it is either *caducous*, falling off at the first opening of the flower, as in *Papaver* and *Epimedium*; *deciduous* with the *Corolla*, as in *Berberis*, and in the plants of the class *Tetradynamia*; or *persisting*, till the fruit is come to maturity, as in the plants of the class *Didynamia*.

* The *Linnæa* and *Morina* have each of them two *Calyces*, one of the flower, the other of the fruit; which is the reason of their being given as instances of both cases.

Variations of an INVOLUCRUM.

The preceding varieties of the Calyx chiefly respect a Perianthium. An Involucrum is either *monophyllous*, as in *Bupleurum*; *diphyllous*, as in *Euphorbia*; *triphyllous*, as in *Butomus* and *Alisma*; *tetraphyllous*, as in *Cornus*; *pentaphyllous*, as in *Daucus*; or *hexaphyllous*, as in *Hæmanthus*.

Variations of a SPATHA.

A Spatha is either *monophyllous*, as in *Narcissus*; *diphyllous*, as in *Stratiotes*; or *imbricate*, as in *Musa*.

C H A P. XII.

Of the different structures of the COROLLA.

THE variations of the Corolla in respect to Number concern either *Petals*, or *Lacinia*, segments: the variation of the Nectarium shall be given separate.

The Corolla, in respect to its *Petals*, is either *monopetalous*, or consisting of one Petal, as in *Convolvulus* and *Primula*; *dipetalous*, of two, as in *Circæa* and *Commelina*; *tripetalous*, of three, as in *Alisma* and *Sagittaria*; *tetrapetalous*, of four, as in the class *Tetradynamia*; *pentapetalous*, of five, as in umbelliferous plants*; *hexapetalous*, of six, as in *Tulipa*,

* The umbelliferous plants are in the order *Digynia* of the class *Pentandria*.

Lilium, Podophyllum; *enneapetalous*, of nine, as in Thea, Magnolia, and Liriodendron; or *polypetalous*, of many, as in Nymphæa.

In respect to its Laciniae (which concern rather the Monopetalous than the Polypetalous, being but rarely observed in the latter) it has either *two*, as in Alfine and Circæa; *three*, as in Holosteum and Hypocoum; *four*, as in Lychnis; or *five*, as in Reseda.

The variations of the Corolla, in respect to Figure, will include what also concerns its *equality*, and its *margin*.

In respect to figure, it is either *undulate*, waved, as in Gloriosa; *plicate*, folded, as in Convolvulus; *revolute*, rolled back, as in Asparagus and Medeola; or *tort*, twisted, as in Nerium, Asclepias, and Vinca. Its more considerable variations, in respect to figure, have been already shewn in Chap. 3.

In respect to equality, it is either *equal*, as in Primula; *unequal* as in Butomus; *regular*, as in Aquilegia; or *irregular*, as in Aconitum and Lamium.

In respect to its margin, it is either *crenate*, notched, as in Linum; *ferrate*, sawed, as in Tilia and Alisma; *ciliate*, fringed, as in Ruta, Menyanthes and Tropæolum; *denticulate* between the segments, that is, having a Denticulus, or little jag, at the bottom of the divisions, as in Samolus and Sideroxylum; or with a *hairy surface*, as in Menyanthes, and Lasianthus a species of Hypericum.

In respect to Proportion, it may be very *long*, as in Catesbæa, Siphonanthus, Brunfelsia and Craniolaria; or very *short*, as in Sagina, Centunculus and Ribes.

In respect to Situation, the base of the Corolla is usually close to the Perianthium, if there be one: It is indeed separated from it by the Germen, in Adoxa, Sanguisorba and Mirabilis; but these instances are very rare.

In respect to Duration, it is either *persisting*, lasting till the fruit is ripe, as in Nymphæa; *caducous*, dropping as soon as the flower is blown, as in Actæa and

and *Thalictrum*; *deciduous*, dropping off with the flower, which is the most common; or *marcescent*, withering, but not falling, as in *Campanula*, *Orchis*, *Cucumis*, *Cucurbita* and *Bryonia*.

Variations of the NECTARIUM.

It has been already said, Chap. 3. that the Nectarium, by the former botanists, had been confounded with the petals; but tho' it commonly attends upon and makes part of the corolla, it is often found distinct from it, as in the instances of *Aconitum*, *Aquilegia*, *Helleborus*, *Isopyrum*, *Nigella*, *Garidella*, *Epidemium*, *Parnassia*, *Theobroma*, *Cherleria* and *Sauvagesia*; which sufficiently proves, that it should be distinguished from the petals. The Nectarium affords very singular varieties, especially if it grows distinct from the petals. It admits of the following principal distinctions.

CALCARIATE Nectaria, such as resemble a *Calcar*, or Spur; and these are either in monopetalous Corollæ, as in *Antirrhinum*, *Valeriana*, *Pinguicula* and *Utricularia*; or in polypetalous, as in *Orchis*, *Delphinium*, *Viola*, *Impatiens* and *Fumaria*.

Nectaria that lie within the substance of the petals, as in *Fritillaria*, *Lilium*, *Swertia*, *Iris*, *Hermania*, *Uvularia*, *Hydrophyllum*, *Myosurus*, *Ranunculus*, *Bromelia*, *Erythronium*, *Berberis* and *Valisneria*.

Nectaria that crown the Corolla, as in *Passiflora*, *Narcissus*, *Pancratium*, *Oxalis*, *Lychnis*, *Silene*, *Coronaria*, *Stapelia*, *Asclepias*, *Cynanchum*, *Nepenthes*, *Cherleria*, *Clusia*, *Hamamelis* and *Diosma*.

Nectaria of singular construction, as in *Reseda*, *Cardiospermum*, *Amomum*, *Costus*, *Curcuma*, *Grewia*, *Urtica*, *Andrachne*, *Epidendrum*, *Helicteres* and *Salix*.

CALYCINE Nectaria, such as are found upon the Calyx, as in *Tropæolum*, *Monotropa*, *Biscutella* and *Malpighia*.

STAMINEOUS Nectaria, such as attend the Stamina; and these are either upon the antheræ, as in *Adenanthera*; or upon the filaments, as in *Laurus*, *Dictamnus*, *Zygophyllum*, *Commelina*, *Mirabilis*, *Plumbago*, *Campanula*, and *Roella*.

PISTILLACEOUS Nectaria, such as accompany the Pistillum: These are upon the Germen, as in *Hyacinthus*, *Iris*, *Butomus*, *Cheiranthus*, *Hesperis* &c.

RECEPTACULACEOUS Nectaria, such as join to the Receptacle, as in *Lathræa*, *Helxine*, *Collinsonia*, *Sedum*, *Cotyledon*, *Sempervivum*, &c. *Mercurialis*, *Kiggelaria*, *Clusia*, *Phyllanthus*, *Melianthus* and *Diosma*.

CHAP. XIII.

Of the different Structures of the STAMINA.

THE Stamina consisting each of a filament and an Anthera (see Chap. 4.) we shall speak first of the variations of the filaments.

As the terms respecting the number of the stamina will be explained in the Chapters that treat of the sexual system, we shall omit here what concerns the number of the filaments themselves, to avoid repetition; but they are sometimes found to have *Lacinia*, segments; and these are either *two*, as in *Salvia*; *three*, as in *Fumaria*; or *nine*, as in the class *Diadelphia*.

The Figure of the Filaments is either *capillary*, like hairs, as in *Plantago*; *plane*, flat, as in *Ornithogalum*; *cuneiform*, wedge-shaped, as in *Thalictrum*; *spiral*, skrew-shaped, as in *Hirtella*; *subulate*, awl-shaped, as in *Tulipa*; *emarginate*, nicked or notched, as in *Porrum*; *reflex*, bent back, as in *Gloriosa*;

riola; or *hirsute*, hairy, as in *Tradescantia* and *Anthericum*.

The Proportion of the filaments is either *unequal*, as in *Daphne*, *Lychnis* and *Saxifraga*; *irregular*, as in *Lonicera*, and the class *Didynamia*; *very long*, as in *Trichostema*, *Plantago* and *Hirtella*; or *very short*, as in *Triglochin*.

The Situation of the filaments, is either *opposite* to the leaves or segments of the Calyx, as in *Urtica*; or *alternate* with them, as in *Elæagnus*. In *monopetalous* flowers they are inserted into the Corolla, but scarce ever in *polypetalous*: In the class *Icosandria* they are always inserted in the Calyx, as they are also in *Epilobium*, *Oenothera*, *Jussiaea*, *Ludwigia*, *Oldenlandia*, *Isnarda*, *Ammannia*, *Peplis*, *Lythrum*, *Glaux* and *Rhexia*; and in some *Apetalous* flowers, without petals, as in *Elæagnus*; but it is more common for them to be inserted into the Receptacle, like the Calyx and Corolla.

Variations of the ANTHERÆ.

The number of the Antheræ is either a *single one* to each filament, as in the generality of plants; *one* common to *three*, as in *Cucurbita*; *one* to *five*, as in the whole class *Syngenesia*; *two* to *each* filament, as in *Mercurialis*; *three* to *each* as in *Fumaria*; *five* to *three* filaments, as in *Bryonia*; or *five* to *each*, as in *Theobroma*.

In some plants that have single Antheræ to the filaments, some of the antheræ are *wanting*; thus *one* is wanting in *Cleome* and *Martynia*; *two* in *Pinguicula* and *Verbena*; *three* in *Gratiola*, and in some *Bignonias* and *Geraniums*; *four* in *Curcuma*; and *five* in *Pentapetes*, and some *Geraniums*.

The number of cells that contain the Pollen, is either *one*, as in *Mercurialis*; *two*, as in *Helleborus*; *three*, as in *Orchis*; or *four*, as in *Fritillaria*.

The Figure of the Antheræ is either *oblong*, as in *Lilium*; *globose*, as in *Mercurialis*; *sagittate*, arrow-shaped,

shaped, as in *Crocus* ; *angulate*, corner'd, as in *Tulipa* ; *cornute*, horned, as in *Hamamelis*, *Erica*, *Vaccinium* and *Pyrola*.

They burst either on the *side*, as in *Leucoium*, and most flowers ; on the *apex*, as in *Galanthus* and *Kiggellaria* ; or from the apex to the *base* through the whole length, as in *Epimedium* and *Leontice*.

They are fastened either by their *base*, as in most plants ; their *tops*, as in *Colchicum* ; their *sides*, as in *Canna* ; or grow to the *Nectarium*, as in *Costus*.

Their situation is either on the *tops* of the filaments, as in most plants ; on the *sides* of the filaments, as in *Paris* and *Afarum* ; on the *pistillum*, as in *Aristolochia* ; or on the *receptacle*, as in *Arum*.

The Figure of the particles of the Pollen appears by glasses to be either *Globus echinatus*, a prickly ball, as in *Helianthus* ; *perforate*, as in *Geranium* ; *double*, as in *Symphytum* ; *rotato-dentate*, wheel-shaped and indented, as in *Malva* ; *angulate*, cornered as in *Viola* ; *reniform*, Kidney-shaped, as in *Narcissus* ; or *Folia Convoluta*, a leaf rolled up, as in *Borrago*.

C H A P. XIV.

Of the different Structures of the PISTILLUM.

THE Pistillum consists of three parts, *Germen*, *Stylus* and *Stigma* : of these the *germen* being no other than the rudiment of the pericarpium, its variations will be considered under that head in the next chapter ; nor need we speak here of the number of the styles, as that will be treated of in the explanation of the sexual system* ; but as the style is often divided, we must consider its *Laciniæ*.

* See Part II. Chap. 3. in which the titles of the orders, which are governed chiefly by the number of styles, are explained.

STYLE—The style, in respect to its laciniae, is either *bifid*, as in *Perficaria* and *Cornutia*; *trifid*, as in *Clethra* and *Frankenia*; *quadrifid*, as in *Rhamnus*; *quinquesfid*, as in *Geranium*; or *dichotomous*, halv'd, and each lacinia halv'd again, as in *Cordia*.

The Figure of the style is either *cylindric*, like a rolling stone, as in *Monotropa*; *angulate*, cornered, as in *Canna*; *subulate* awl-shaped, as in *Geranium*; *capillary*, like hairs, as in *Ceratocarpus*; or *thicker* towards the top, as in *Leucoium*.

In respect to Length, it is either *very long*, as in *Tamarindus*, *Cassia*, *Campanula*, *Scorzonera* and *Zea*; *very short*, as in *Papaver*; or of the length of the stamina, as in *Nicotiana*, and most flowers.

In respect to thickness, it is either *thicker* than the stamina, as in *Leucoium*; *thinner*, as in *Ceratocarpus*; or of *equal* thickness with them, as in *Lamium*.

Its Situation is either on the *apex* of the germen, as is too common to need example; both *above* and *below* the germen, as in *Capparis* and *Euphorbia* (unless the lower part in these be considered as the extension of the receptacle;) or on the *side* of the germen, as in *Rosa*, *Rubus*, and the rest of the plants of the order *Polygynia*, in the class *Icosandria*, and also in *Hirtella* and *Suriana*.

As to its Duration, it is sometimes *persisting*, as in the class *Tetradynamia*.

STIGMA—The Number of the stigmata is either a *single* one, as in most flowers; *two* as in *Syringa*; *three*, as in *Campanula*; *four*, as in *Epilobium* and *Parnassia*; or *five*, as in *Pyrola*.

The Laciniae of the stigma are either *convolute*, rolled together, as in *Crocus*; *capillary*, as in *Rumex*; *revolute*, rolled back, as in *Dianthus*, *Campanula*, and in the class *Syngenesia*; or *bent* to the left as in *Silene*: and in respect to their Number, the stigma may be *sexpartite*, divided into six parts, as in *Afarum*; or *multifid*, with many divisions, as in *Turnera*.

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The Figure of the stigma is either *capitate*, headed, as in Tribulus, Hugonia, Vinca, Ipomæa, and Clusia; *globose*, globe-shaped, as in Primula, Hottonia, Linnaea, and Limosella; *ovate*, egg-shaped, as in Genipa; *obtusè*, blunt, as in Andromeda; *truncate*, lopped, as in Maranta; *pressed down obliquely*, as in Actæa and Daphne; *emarginate*, notched, as in Melica; *orbiculate*, rounded, as in Lythrum; *peltate*, like a pelta, or little shield, as in Sarracena, Nymphaea, Clusia and Papaver; *coroniform*, crown-shaped, as in Pyrola; *cruciform*, cross-shaped, as in Penæa; *uncinate*, hooked, as in Viola and Lantana; *canaliculate*, grooved or channelled, as in Colchicum; *concarve*, hollow as in Viola; *angulate*, cornered, as in Muntingia; *striate*, streaked, as in Papaver; *plumose*, feathery, as in Rheum, Triglochin, Tamarix, and in Grasses; or *pubescent*, downy, as in Cucubalus and Lathyrus.

In respect to Length, it may be *filiform*, thread-like, as in Zea; or as *long* as the style, as in Genipa.

In respect to Thickness, it may be *foliaceous*, resembling a thin leaf, as in Iris.

In respect to Duration, it is either *marcescent*, withering, as in most plants; or *persisting*, as in Sarracena, Hydrangæa, Nymphaea and Papaver.

C H A P. XV.

Of the different structures of the PERICARPIUM.

THE Variations of the pericarpium itself, in respect to Number, arise properly from the number of its capsules, that is, the number of parts into which the fruit is *externally* divided, the internal divisions respecting the loculaments.

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In respect to external division, the pericarpium is either *absent*, as in the order Gymnospermia of the Class Didynamia; *unicapsular*, consisting of one capsule, as in Lychnis; *bicapsular*, of two, as in Pæonia and Asclepias; *tricapsular*, of three, as in Veratrum and Delphinium; *quadricapsular*, of four, as in Rhodiola; *quinquecapsular*, of five, as in Aquilegia; or *multicapsular*, of many, as in Caltha, Trollius and Helleborus.

The fruit in respect to the Loculaments, or internal divisions of the pericarpium, is either *unilocular*, of one cell, as in Trientalis and Primula; *bilocular* of two, as in Hyoscyamus, Sinapis and Nicotiana; *trilocular*, of three, as in Lilium; *quadrilocular*, of four, as in Euonymus; *quinelocular*, of five, as in Pyrola; *Sexlocular*, of six, as in Asarum and Aristolochia, *octolocular*, of eight, as in the species of Linum, called Radiola; *decemlocular*, of ten, as in Linum, or *multilocular*, of many, as in Nymphaea.

The pericarpium, in respect to the number of its Valvules, or outer inclosures, is either *bivalve*, of two valves, as in Chelidonium and Brassica; *trivalve*, of three, as in Viola, Polemonium and Helianthemum; *quadrivalve*, of four, as in Ludwigia and Oenothera; or *quinquevalve*, of five, as in Hottonia.

The *dissepiments* are either *parallel* to the Valvules, as in Luneria and Draba; or placed the *contrary* way, as in Biscutella and Thlaspi.

The most considerable differences in the FIGURE of the pericarpium, with the names assigned for each, have been explained in Chap. 6. It varies farther, in being *turbinate*, narrowing like a child's top, as in Pyrus; *inflate*, puffed, as in Cardiospermum and Staphylæa; *membranaceous*, composed of thin membranes, as in Ulmus; *triquetrous*, *tetragonous*, *pentagonous*, of three, four, or five sides, as in Averrhoa, Zygophyllum, &c. or *articulate*, jointed, as in Ornithopus, Hedysarum and Raphanus.

The OPENING of the Pericarpium for discharging the seeds when the fruit is ripe, is either at the apex,

which may be *quadridentate*, split into four segments, as in *Dianthus*; *quinquedentate*, into five, as in *Alfina*; or *decemdentate*, into ten, as in *Cerastium*; opening at the base *trifariam*, into three parts, as in *Triglochin* and *Campanula*; or *quinquefariam*, into five parts, as in *Ledum*; at the *angles, corners, longitudinally, lengthways*, as in *Oxalis* and *Orchis*; thro' a pore, hole, as in *Campanula*; or *horizontally*, across the middle, as in *Anagallis*, *Plantago*, *Amaranthus*, *Portulaca* and *Hyoscyamus*.

All fruit that is *articulate*, jointed, opens at every one of the joints, each of which is *monospermous*, single-seeded.

The CONFINEMENT of the seeds is sometimes *elastic*, bursting like a spring, as in *Oxalis*, *Elaterium*, *Momordica*, *Impatiens*, *Cardamine*, *Phyllanthus*, *Euphorbia*, *Justicia*, *Ruellia*, *Dictamnus*, *Hura*, *Ricinus*, *Tragia*, *Jatropha*, *Croton*, *Clusia* and *Acalyphia*.

The SITUATION of the Pericarpium is at the receptacle of the flower, either placed *under* it, as in *Vaccinium* and *Epilobium*; *over* it, as in *Arbutus* and *Tulipa*; or both *above* and *below* it, as in *Saxifraga* and *Lobelia*.

C H A P. XVI.

Of the different Structures of the SEEDS.

IN respect to the NUMBER of seeds contained within the fruit, plants are either *Monospermous*, having one seed, as in *Polygonum* and *Collinsonia*; *dispermous*, two, as in *Daucus*; *trispermous*, three, as in *Euphorbia*; or *tetraspermous*, four, as in *Tournefortia*.

In respect to the number of locular contents of the seed itself, it has but one in most parts; but is *bilocular*

cular, with two cells, in Cornus, Xanthium, Locusta, Valeriana and Cordia.

In respect to its FIGURE, it is either *cinct*, girt, as in Arenaria and Bryonia; *cordiform*, heart-shaped as in Medeola; *reniform*, kidney-shaped, as in Anacardium and Phaseolus; *ovate* *, egg-shaped, as in Polygala and Isatis; or *echinate*, prickly like an Echinus or Hedge-hog, as Lappula, a species of Myosotis.

In respect to their SUBSTANCE, they are *osseous*, bony, as in Corylus, Lithospermum, and nuts of all kinds; or *callous*, tough as in Citrus.

The CORONULA, little crown, that attends many seeds, is either *Calyculus*, a small Calyx, formed of the perianthium of the flower, as in Scabiosa, Knautia, Ageratum and Arctotis; or *pappus*, a down; and this pappus is either *capillary*, like a hair, that is, simple and filiform; *thread-shaped*, as in Hieracium and Sonchus; *plumose*, feathery, that is, shaggy and compound, as in Crepis, Scorzonera and Tragopogon; *paleaceous*, chaffy, as in Bidens, Silphium, Tagetes and Coreopsis; or *wanting*, as in Tanacetum.

The Seed has an ARILLUS, (See Chap. 7.) in Coffea, Jasmimum, Cynoglossum, Cucumis, Dictamnus, Diosma, Celastrus and Euonymus.

The Seeds in respect to SIZE may be *very small*, as in Campanula, Lobelia, Trachelium and Ammannia; or *very large*, as in Coccus.

In respect to SITUATION, they are either *nidulantia*, nesting, that is, dispersed about the pulp, as in Nymphæa; fastened to the *future*, as in plants that are *siliquose*, podded; fastened to the *columella*, as in Malva; or placed on *receptacles*, as in Nicotiana and Datura.

The HILUM of the seed is evident in Cardiospermum and Staphylæa.

The CORCULUM is close to the Hilum.

CHAP.

* The Term *Ovate* is used to express an elliptical figure when it is broader at one end than the other; and the term *Oval* for the same figure, when the ends are alike.

C H A P. XVII.

Of the different Structures of the RECEPTACLE.

IT is in the class Syngenesia, which contains the compound flowers, that the varieties of the Receptacle are principally to be considered.

In respect to its FIGURE, it is either *plane*, flat, as in Achillea; *convex* rounding, as in Matricaria; or *conic*, shaped like a cone, as in Anthemis and Melampodium.

In respect to its SURFACE, it is either *naked*, as in Matricaria; *punctate*, dotted, as in Tragopogon; *villose*, shaggy, as in Andryala; *setose*, bristly, as in Centaurea; or *paleaceous*, chaffy, as in Hypochæris and Anthemis.

In some simple flowers, the fruit has *separate* Receptacles, as in Magnolia, Uvaria and Michelia.

C H A P. XVIII.

Of the SINGULARITIES in the Structure of the Parts of FRUCTIFICATION.

BY a singular structure of the parts of Fructification, is to be understood such a one as is observed but in very few Genera; it is directly opposed to the natural structure explained in Chap. 10. For instances of this we may mention the Arum, whose stamina are within the pistilla; the Adoxa, whose germen separates the corolla from the calyx; the Salvia, whose filaments are *articulate*, jointed; the Eriocaulon, whose stamina are placed on the germen, and whose corolla and calyx are below the germen; and

and the *Magnolia*, the receptacle of whose fruit is *capitate*, headed, the seeds, which are like berries, hanging by a thread out of the capsule: but to take the parts in their order.

The CALYX is usually less colored than COROLLA; but in the American *Bartia* the perianthium is bloody; in the herbaceous *Cornus* the petals are black, but the involucre white; and in the American *Cornus* the involucre is red, and *cordate*, heart-shaped. In *Astrantia* the involucre is colored; and in Palms the *spathæ* are bloody; where the corolla is wanting, the perianthium is wont to be more colored, especially when the flowers are blowing, as in *Ornithogalum*, *Perficaria* and *Polygonum*; where either the calyx or the corolla is found to be less colored, the leaves often take a color, as in *Amaranthus tricolor*.

In most plants the STAMINA and PETALS are inserted into the receptacle, in the bottom of the flower; but the plants of the class *Icosandria* have a monophyllous calyx, the inner side of which is girt with a line, to which the stamina and petals are fastened; and the calyx is also observed to support the flowers in some other plants, as in *Lythrum*, *Epilobium*, *Oenothera*, *Ammannia*, *Isarda*, *Peplis* and *Elæagnus*. In some plants the receptacle is lined on all sides with the perianthium, and the corolla adheres to the perianthium as though it were glued to it; this is found in the Cucurbitaceous plants, such as *Cucurbita*, *Passiflora*, *Fevillæa*, *Momordica*, *Trichosanthes*, *Cucumis*, *Bryonia*, *Sicyos*, *Melothria* and *Gronovia*; the same is also observed in *Cactus*: In some others there is a receptacle that elevates the pericarpium, as in *Passiflora*, *Capparis*, *Breynia*, *Arum*, *Calla*, *Dracontium*, *Pothos*, *Zostera*, *Nepenthes*, *Clusia*, *Helicteres* and *Sisyrinchium*.

In monopetalous flowers, the stamina are usually inserted into the petal, but they are separate from it
in

in the *plantæ bicornes* *, viz. in *Ledum*, *Azalea*, *Andromeda*, *Clethra*, *Erica*, *Myrsine*, *Memecylon*, *Santalum*, *Vaccinium*, *Arbutus*, *Royena*, *Diospyros*, *Melastoma* and *Pyrola*; they are separate also in *Cissus* and *Aloe*. In polypetalous flowers, the stamina are usually separate from the petals: but this also has a few exceptions; for in the *Statice*, which is pentapetalous, the filaments are inserted in the claws of the petals; in *Melanthium*, which is hexapetalous, they are inserted in the petals; and in the *Lychnis*, which is pentapetalous, as also in *Saponaria*, *Cucubalus*, *Silene* and *Agrostemma*, which were formerly ranged with the *Lychnis*, every other stamen is fastened to the claws of the petals.

The ANTHERÆ are commonly placed on the tops of the filaments: but they stick close to the sides of the filaments in *Paris* and *Asarum*, and adhere to the stigma without Filaments in *Aristolochia*.

The singularities of the NECTARIUM have been already mentioned in Chap. 12.

The PISTILLUM is commonly placed within the Antheræ: but in *Arum* there is this singularity, that the receptacle runs out into a club, the base of which is occupied by the pistilla, and the upper part by the stamina; so that here the pistilla stand on the outside of and surround the stamina; and in the *Calla* of *Ethiopia* these parts are disposed in the same manner. The *Rumex* is singular in the insertion of the stamina.

The STYLE is commonly placed on the top of the germen: some exceptions to this have been given in Chap. 14. to these may be added *Passerina*, *Gnidia*, *Struthia*, and *Stellaria*.

The PERICARPIUM is generally shut: but in *Reseda* and *Datisca* it is always open; in *Parnassia* it gapes at the time of flowering, and closes afterwards.

That

* Having two horns; these plants have been so called from their bifid Antheræ.

That the pericarpia are ever found one with in another, the greater containing the smaller ones, Linnæus refuses to admit; for although there is the appearance of such a singularity in Magnolia, Uvaria, and Michelia, he thinks the outer pericarpium is in such cases to be looked upon only as a common receptacle.

Where the pericarpium is a berry, it is distinguishable into *proper* berries, those which are formed of the pericarpium; and *improper* or *singular*, such as are formed of any of the other parts.

The berry is improper or singular in the following instances, viz. When it is a *calyx*, as in Blitum, Morus, Basella, Ephedra, Coix, Rosa and Coriaria; a *receptacle*, as in Taxus, Rhizophora, Anacardium, Ochna, Laurus, Ficus, Dorstenia and Fragaria; a *seed*, as in Rubus, Magnolia, Uvaria, Michelia, Præsum, Uvularia, Panax, Adonis, Crambe and Osteospermum; an *arillus*, as in Euonymus and Celastrus; a *nectarium*, as in Mirabilis; a *corolla*, as in Adoxa, Poterium and Coriaria; a *capsule*, as in Euonymus, Androsæmum, Cucubalus and Epidendrum; a *dry* berry, as in Linnæa, Galium, &c. Tetragonia, Myrica, Trientalis, Tropæolum, Xanthium, Juglans, Ptelea, Ulmus, Comarum, Amygdalus, and Mirabilis; a *capsule* externally, as in Dillenia, Clusia, Nymphæa, Capparis, Breynia, Morifonia, Stratiotes, Cyclamen and Strychnus; a *hollow* berry, as in Staphylæa, Cardiospermum and Capsicum; a *conceptacle*, as in Actæa; a *legumen*, as in Hymenæa, Cassia, Inga and Ceratonia; or a *srobilus*, as in Anona and Juniperus.

The berry does not naturally burst, being soft, and the dispersion of the seeds being designed to be by means of animals.

The berries in the Adonis of the Cape are evidently *aggregate*, many united in one.

C H A P. XIX.

Of AGGREGATE Flowers,

COMPLETE flowers are either simple or aggregate. Simple flowers differ from aggregate in this, that they have not any part of fructification common to many flowers, as is the case with aggregate. Flowers are called aggregate, when many *flosculi*, florets, are, by the mediation of some part of the fructification common to them all, so united, that no one of them could be taken out without destroying the form of the whole, of which it was a part. The common part in aggregate flowers is either the receptacle or the calyx. A partial flower of the aggregate one is called *flosculus*, a floret. Aggregate flowers are primarily divisible into seven kinds, viz. 1. The *aggregate*, properly so called. 2. The *compound*. 3. The *umbellate*. 4. The *cymose*. 5. The *amentaceous*. 6. The *glumose*. 7. The *spadiceous*: All which we shall explain in their turns.

1. An AGGREGATE flower, properly so called, has a receptacle that is *dilate*, extended in breadth, the florets standing on Peduncles, foot-stalks*, as in Scabiosa, Knautia, Dipsacus, Cephalanthus, Globularia, Leucadendron, Protea, Brunia, Barreria and Statice.

2. A COMPOUND† flower † is an aggregate one, comprehending many florets that are *sessile*, squatted, or without Peduncles, on a common receptacle that is entire, and having also a common perianthium, but furnished with Antheræ that grow together in the form of a cylinder.

The

* Peduncle is the foot-stalk of a flower only; the foot-stalk of a leaf is called Petiole.

† These are the flowers of the class Syngenesia, see Part II. Chap. 22.

The properties of a compound flower are, 1. A common receptacle enlarged and undivided. 2. A common perianthium surrounding all the florets. 3. The florets monopetalous and sessile. 4. The Antheræ of each floret five in number, and growing together in a cylinder. 5. A monospermious germen under each of the florets. Of these properties the two last are essential to a compound flower; but observe, that there are some whose calyx contains only a single floret, as Echinops, Stoebe, Corymbium and Artemisia.

Compound flowers are of three kinds: 1. *ligulate*, when all the corollulæ, little corollæ, of the florets are *plane*, flat, shaped like *ligula*, a narrow tongue, or fillet, and expanded towards the outer side. 2. *Tubulose*, when all the corollulæ of the florets are tubulose, and nearly equal. 3. *Radiate*, having rays, when the corollulæ of the *disk*, middle parts, are tubulose, and those of the *circumference*, margin, of another form: Which variation affords three cases, viz. when the corollulæ of the circumference are either *ligulate*, as in Achillea; *tubulose*, but unlike the tubulose florets of the disk, as in Centaurea; or *naked*, as in Artemisia and Gnaphalium. A compound flower usually consists of many florets, but rarely of a determinate number of them.

3. An UMBELLATE flower is an aggregate one, consisting of many florets placed on a receptacle, on fastigiate peduncles * that are all produced from the same point: A *simple* Umbel is when the receptacle is but once divided into peduncles; a *compound* umbel is when all the common peduncles are subdivided into *Umbellula*, little Umbels; an *Umbellula* therefore is a partial umbel.

Umbellate flowers, properly so called †, have the following

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* See the first note in Chap. 8.

† The umbellate flowers, properly so called, belong to the Order Digynia of the Class Pentandria; see Part II. Chap. 8.

lowing properties. 1. A common receptacle divided into peduncles in the manner above-mentioned, whether the umbel produced be *plane*, flat; *convex*, rounding; or *concave*, hollow. 2. A germin under the corolla. 3. Five distinct stamina that are deciduous. 4. A bifid pistillum. 5. Two seeds joined at their summits.

A *Radiate* umbel is when the marginal petals are larger than those of the disk, as in *Tordylium*, *Caucalis*, *Coriandrum*, *Ammi*, and some species of *Heracleum*; an umbel may vary also in having the flowers of the margin differing in sex from those of the disk, as in *Astrantia*, *Caucalis*, *Artemisia*, *Oenanthe* and *Scandix*. The *involucrum* varies, in being either *tetraphyllous*, of four leaves, as in *Hydrocotyle*, *Sison* and *Cuminum*; *pentaphyllous*, of five, as in *Bupleurum*, *Scandix* and *Bubon*; *heptaphyllous*, of seven, as in *Ligusticum*; *decaphyllous*, of ten, as in *Artemisia*: with the partial involucrum *dimidiate*, halved, going but half round, as in *Aethusa*, *Coriandrum* and *Sanícula*; or *caducous*, falling off, as in *Ferula* and *Heracleum*.

4. A *CYMOSE* flower is an aggregate one, of many florets, placed on a receptacle upon fastigate peduncles, the primary ones of which issue from the same centre as in an umbel; but the secondary, or partial ones, lie dispersed without order; which circumstance distinguishes the cyma from the umbel, as in *Opulus*, *Ophiorrhiza*, and the species of *Cornus* called *Virga sanguinea*, or bloody-rod.

5. An *AMENTACEOUS* aggregate flower has a *filiform*, thread-shaped, receptacle, along which are disposed *amentaceous squamæ*, scales that form an amentum or catkin, as in *Xanthium*, *Ambrosia*, *Parthenium*, *Iva*, *Alnus*, *Betula*, *Salix*, *Populus*, *Corylus*, *Carpinus*, *Juglans*, *Fagus*, *Quercus*, *Liquidambar*, *Cynomorion*, *Ficus*, *Dorstenia*, *Parietaria*, *Urtica*, *Pinus*, *Abies*, *Cupressus*, *Thuya*, *Juniperus*, *Taxus* and *Ephedra*.

6. A **GLUMOSE** aggregate flower has a filiform receptacle, the base of which is furnished with a common *glume*, husk, as in *Bromus*, *Festuca*, *Avena*, *Arundo*, *Briza*, *Poa*, *Aira*, *Uniola*, *Cynofurus*, *Melica*, *Elymus*, *Lolium*, *Triticum*, *Secale*, *Hordeum*, *Scirpus*, *Cyperus* and *Carex*.

7. A **SPADICEOUS** aggregate flower is, when there is a receptacle common to many florets placed within a *spatha* or sheath ; such a receptacle is called a *spadix*, and is either *branched*, as in palms, or *simple*. In this last case the florets may be disposed either all round it, as in *Calla*, *Dracontium* and *Pothos* on the the lower part of it, as in *Arum* ; or on *one side* of it, as in *Zostera*.

CHAP. XX.

Of LUXURIANT Flowers commonly called DOUBLE.

A Flower is said to be luxuriant, when some of the parts of the fructification are augmented in number, and others thereby excluded. The luxuriance is commonly owing to the luxuriance of its nourishment ; the part multiplied is usually the corolla, but sometimes the calyx also ; and by this increase of the covers, the essential parts of fructification are destroyed. Luxuriant flowers are divisible into, 1. *Multiplicate*, multiplied. 2. *Pleni*, full. And, 3. *Proliferous*, producing young ; to which may be added, 4. *Mutilate*, maimed ; such as are deficient in some part, which stand opposed to the luxuriant ones : all these shall be explained in their order.

1. Flowers are said to be **MULTIPLICATE**, when by the increase of the corolla only a part of the stamina are excluded ; and this distinguishes them from the *flores pleni*, full flowers, in which the multiplication

tion of the corolla is so great as to exclude them all. Multiplicate flowers are distinguished into *Duplicate*, *Triplicate*, *Quadruplicate*, &c. that is, having a double; treble, or quadruple series or row, according to the number of the repetitions of the corolla. The *Polypetalous* flowers are the most subject to multiplication; the *Monopetalous* are multiplied likewise, but it is very uncommon to meet with them full. A colored *Perianthium*, though it may have the appearance of a repetition of the corolla, ought not to be considered as such; for though this appearance is in some degree *monstrous*, unnatural, it is no multiplication.

2. A flower is said to be *PLENUS*, full, when the corolla is so far multiplied, as to exclude all the stamina, as was before observed. The *Plenitude*, fullness, is occasioned by the stamina running into petals, with which the flower is so crowded as frequently to choak the pistillum also. The parts essential to generation being thus destroyed in full flowers, it is evident they must be barren; wherefore no good seed is to be expected*. And for the same reason of their imperfection, we should be cautious also of constituting a genus from them; for the characters of a genus should be drawn from the parts when in the natural state, and not when in a state of luxuriance.

Plenitude is chiefly incidental to polypetalous flowers, as in *Malus*, *Pyrus*, *Perfica*, *Cerasus*, *Amygdalus*, *Myrtus*, *Rosa*, *Fragaria*, *Ranunculus*, *Caltha*, *Hepatica*, *Anemone*, *Aquilegia*, *Nigella*, *Papaver*, *Pæonia*, *Dianthus*, *Silene*, *Lychnis*, *Coronaria*, *Lilium*, *Fritillaria*, *Tulipa*, *Narcissus*, *Colchicum*, *Crocus*, *Cheiranthus*, *Hesperis*, *Malva*, *Alcea*, and *Hibiscus*.

Plenitude of monopetalous flowers is by some authors

* Some few, as *Papaver* and *Nigella*, perfect their seed; but these are rather multiplicate flowers than full ones.

thors held a contradiction ; but this cannot be granted ; for there are instances of it in *Colchicum*, *Crocus*, *Hyacinthus* and *Polianthes* : however, it is rare that their Luxuriancy passes duplicity. When they are filled, it is by the multiplication of the *Lacinia*, segments ; whereas the polypetalous are usually filled by the multiplication of the petals ; but the manner in which the *Impletion*, filling, is brought about, must be more particularly considered.

The *Impletion* is either in simple or compound flowers ; we shall begin with the simple.

The impletion of SIMPLE flowers, is by the increase either of the petals, or of the Nectarium. The impletion of the *Aquilegia* is observed to be after three different manners, viz. either, 1. By multiplying its petals, and excluding the nectaria. 2. By multiplying its nectaria, and excluding its petals : or, 3. By multiplying its nectaria, and retaining its petals ; in which last case the five petals remain, and the spaces between them are each of them filled up with a triple case of nectaria, that is, three nectaria buried one within another.

The impletion of the *Nigella* is by multiplying the nectaria only ; that of the *Narcissus* two ways, by multiplying either the nectarium only, or both nectarium and petals ; that of *Delphinium*, for the most part, by multiplying the petals, and excluding the nectarium : the change wrought in the *Saponaria Anglicana* is remarkable, the flower from pentapetalous becoming truly monopetalous ; and the alteration in the *Peloria* is also very singular*. But the most
extra-

* The *Peloria* is a plant which has been found in some parts of Sweden, growing amongst the species of *Antirrhinum* called *Linaria*. It resembles the *Linaria* so nearly, in every thing but the flower, that they are not to be known one from the other, till their flowers appear ; and even in the flowers they agree in the calyx, pericarpium, and seeds, and also in colour : Which has given rise to a supposition, that the *peloria* is only a *Linaria* in a monstrous state ; see the dissertation of Daniel Rudberg

extraordinary instance of plenitude is that of the *Opulus flore globoso*, commonly called the Gelder Rose. In the common simple *Opulus*, the flowers are produced on a cyma, which consists of a great number of *campanulate*, bell shaped, hermaphrodite flowers in the disk, and of others in the circumference, whose corollæ are larger, flat, and wheel-shaped, and that are *barren*, wanting the pistillum. But in the *Opulus flore globoso*, all the flowers of the disk are barren also, and shaped like those of the circumference; so that the impletion here arises only from the additional number of barren flowers, the corollæ of which are of a larger size; and in this it resembles the impletion of the compound flowers, of which we shall presently speak.

Before we leave the simple flowers, it will be of use to remark, that a simple flower, in a state of luxuriance, may in all cases be distinguished from a compound one in its natural state, by this rule; that in *simple* flowers, how much soever multiplied, there is but one pistillum in the centre of the flower, common to the whole multiplication; whereas in *compound* flowers, each of the Florets is furnished with its own pistillum and stamina.

We come now to the impletion of *Compound* flowers; that these are of three kinds, *Ligulate*, *Tubulose*, and *Radiate*, has been shewn and explained in Chap. xix. where it has also been seen, that there is not either in the ligulate or tubulose any distinction of disk or radius, all the florets in these being alike; but

Rudberg on the *Peloria* in the *Amœnitates Academica*, Vol. I. p. 280. But as the *Linaria* and *Peloria* differ so widely in their Corolla and Stamina, that the former must be referred to the class *Didynamia*, and the latter to the class *Pentandria*, the *Peloria* cannot be supposed to derive its origin from the *Linaria*, without overturning the fundamental principles of the science: And therefore till more instances can be produced of this kind of irregularity in nature, the *Peloria* cannot with safety be considered otherwise, than as a Genus distinct from that of *Antirrhinum*.

but that the contrary is the very characteristic of the radiate; now this being attended to, the manner of the impletion will be easily understood. Compound flowers gain their impletion two ways, either by the radius or the disk. We shall begin with the first.

Impletion by the *Radius* is when, by the multiplication of the radius, the disk of the flower is filled up; as in *Helianthus*, *Calendula*, *Chrysanthemum*, *Anthemis*, *Matricaria*, *Parmica*, *Tagetes*, and the species of *Centaurea* called *Cyanus*. In this sort of impletion, which belongs only to radiate flowers, it is observeable, that all the florets which fill up the disk follow the conditions of those of the radius; so that if the florets of the radius in the natural flower have a pistillum, all those of the full flower will have one also, as in *Matricaria*, *Bellis*, *Chrysanthemum*, and *Tagetes*; or if they have no pistillum, then it will also be wanting in the full one, as in *Helianthus*, *Calendula*, and *Centaurea*; and the same holds true of the male part also; for as the florets of the radius in the natural flower are never furnished with antheræ, so these are wanting also in those of the full ones. This last remark is of great use to distinguish a radiate full flower, from a ligulate natural one; which might be confounded in many cases, were we not apprised, that there are antheræ in the latter, but none in the former; by this rule, in *Chrysanthemum*, *Helianthus*, *Calendula*, and *Tagetes*, when the disk is destroyed by the multiplication of the radius, we know by the defect of antheræ, that it is only the luxuriance of a radiate flower, as in *Hieracium*, *Leontodon* and *Sonchus*; by the presence of the antheræ we know the flowers to be ligulate and natural.

Impletion by the *disk* is, when there is no multiplication of the radius; but the corollulæ of the disk run out into length, and have their brims less divided: this manner of impletion seems to concern only

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the *Radiate* and the *Tubulose* *. In the *Radiate*, it will so far affect the radius, as to change its flowers from ligulate to tubulose: instances of this manner of impletion may be had in *Bellis*, *Matricaria*, and *Tagetes*. In the *Carduus* of the Oats, which is a species of *Serratula*, the corollulae are both lengthened and enlarged. In respect to the *ligulate* flowers, if we confine ourselves to the two-fold manner of impletion, after the author whose divisions we have adopted, we shall be obliged to call their impletion also, an impletion by the disk; though the manner of it differs from that last explained; and the expression does not so well answer to flowers, that in the Botanical sense of the term have properly no disk at all. But not to stop at too great niceties, their impletion is by the lengthening of their stigmata, and the enlarging and diverging of their germina; by which augmentations, the full flowers are to be distinguished from the natural ones, as in *Scorzonera* and *Lapfana vulgaris*; which last, *Linnaeus* tells us, is frequently found with a full flower at Upsal.

3. Flowers are said to be *PROLIFEROUS*, when one flower grows out of another: this generally happens in full flowers, the fulness being the cause of their becoming prolific. Prolification is after two manners; 1. From the centre; 2. From the side.

Prolification from the *Centre*, which happens in simple flowers, is, when the pistillum shoots up into another flower standing upon a single peduncle; of which there are instances in *Dianthus*, *Ranunculus*, *Anemone*, *Geum* and *Rosa*.

Prolification from the *Side*, which happens in aggregate flowers, properly so called (see Chap. xix.) is, when many pedunculate flowers are produced out of one common calyx; of which there are instances in *Bellis*, *Callendula*, *Hieracium*, and *Scabiosa*.

In

* This is not expressly asserted, as the distinction is omitted, in the *Philosophia Botanica* of *Linnaeus*; but it appears to be his

In *umbellate* flowers, the proliferation is by the increase of the *umbellulæ*, one simple *umbellula* producing another, as in *Cornus* and *Periclymenum*; in this manner compound umbels will become *supradecomposed*, more than compounded a second time, as in *Selinum* and *Thyselinum*.

A prolific flower is called *Frondose**, leafy, when it produces leaves; this rarely happens, but instances of it have been found in *Rosa*, *Anemone* and others: the other kinds of proliferation are frequent enough.

4. *MUTILATE* flowers are the reverse of *luxuriant*. *Linnæus* confines the term to those flowers only that want the *corollæ*, though they ought to be furnished with it; which often happens in *Ipomæa*, *Campanula*, *Ruellia*, *Viola*, *Tussilago*, and *Cucubalus*: the cause of this defect he ascribes chiefly to the want of sufficient heat.

The luxuriancy of the *Calyx*, mentioned in the beginning of this chapter, is very infrequent, but not without instances; in *Dianthus Caryophyllus* there is a variety, in which the *Squamæ*, scales, of the calyx are so multiplied as to constitute a perfect spike in a manner most singular: The *Gramina*, grasses, of the Alps, become full by their *Glumæ*, husks, shooting out into leaves, as in a species of the *Festuca*; and in *Salix rosea*, and *Plantago rosea*, the *squamæ* of

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his meaning, by his speaking of the impletion of *ligulate* flowers separately afterwards.

* *Frons*, with the Ancients (though frequently used, in respect to trees, in the same sense with *Folium*, a Leaf) implied, in its proper signification, a part of the wood of the tree with the leaf; or, as we should express it, a twig with leaves; and for this reason they never applied the term to the leaves of herbs (which were always called *Folia*) but only to those of trees. *Linneus* has availed himself of this old distinction to make it a botanical term; which he applies to express the circumstance of *Palms* and *Filices*, *Ferns*; in the former of which the branches, and in the latter even the stem itself is an actual leaf: and here again he applies it to the leafy proliferation in question, calling it *Frondose*, rather than *Foliaceous*, for the like reason.

the anther of the former, and the *Bractea* floral leaves, of the spike in the latter will shoot into leaves also, such as either on the same or

Linnæus has enumerated some tribes of plants which are not found subject to luxuriance, but as the heads, and now which he has ranged them, are taken from the systems of preceding writers, and not from the sexual, it would perplex the reader to explain them: the curious may have recourse to them in the *Philosophia Botanica*, page 81: as in Male flowers, as in Hermaphrodite and Female flowers, as in

Of such as are polygamous on two distinct roots, the cases are four. **C. H. A. R. XXI** Male as in Panax, Naja, and Dioscoros. 2d. Hermaphrodite flowers, as in Linnaeus. 3d.

THE distinction of flowers into male, female, hermaphrodite and neuter, has been already explained in Chapter iv. To which we must add, that hermaphrodite flowers are sometimes distinguishable into Male hermaphrodites, and Female hermaphrodites: This is when, although the flower contains the parts belonging to each sex, one of them proves abortive or ineffectual; if the defect be in the Stamina, it is a Female hermaphrodite; if in the Pistillum, a Male one. The case wherein this distinction becomes necessary, happens very rarely: It will be shewn in the course of this Chapter.

Plants, in respect to sex, take their denominations from the sex of their flowers in the manner following.

1. **HERMAPHRODITE** plants are such as upon the same root bear flowers that are all hermaphrodite as in most genera.

2. **ANDROGYNOUS**, Male and Female, such as upon the same root bear both male and female flowers, as in the class Monoecia.

3. **MALE**, such as upon the same root bear male flowers only, as in the class Dioecia.

4. **FEMALE**

16. **FEMALE**, such as upon the same root bear **female flowers only**, as in the class **Diœcia**.

5. **POLYGAMOUS ***, such as either on the same, or on different roots bear **hermaphrodite flowers** of either or both sexes; as in the class **Polygamia**.
Of plants that are **Polygamous** on the same root, there are three cases; 1st, **Male Hermaphrodite** and **Female Hermaphrodite** flowers; which is a rare case, but is observed in *Musa*. 2d, **Hermaphrodite** and **Male** flowers, as in *Veratrum*, *Celtis*, *Ægilops*, and *Valantia*. 3d, **Hermaphrodite** and **Female** flowers, as in *Parietaria* and *Atriplex*.

Of such as are **polygamous** on two distinct roots, the cases are four. 1st, **Hermaphrodite** flowers and **Male**, as in *Panax*, *Nyssa*, and *Diospyros*. 2d, **Hermaphrodite** flowers and **Female**, as in *Fraxinus*. 3d, **Hermaphrodite** flowers and both **Male** and **Female**, as in *Gleditsia*. 4th, **Androgynous** and **Male**, as in *Arctopus*. Of plants that are **polygamous** on three distinct roots there is but one case, viz. **Androgynous**, **Male** and **Female**, as in *Ficus* **.

* See the signification of this term explained in the account of the title of the class **Polygamia**, in Part II. Chap. xvi. These plants are by some called **Hybrid**, mongrel.

† In the *Philosophia Botanica*, the hermaphrodite flowers of this class are put down **Hermaphrodite**, **Female Hermaphrodite**; but the instances shew it to be a mistake.

‡ **Hermaphrodite**, again in *Phil. Bot.*
§ **Hermaphrodite** again.

¶ In the *Gleditsia*, which is the only known instance of this case, the male flowers and the hermaphrodites are produced upon the same plant, and the females on a distinct one.

¶ This case and the next, having no hermaphrodite flowers, seem to be exceptions to the definition of polygamous plants.

** The instance of this case given in the *Philosophia Botanica* is the *Eupetrum*; but that Genus is removed to the class **Diœcia** in the last edition of the *Genera Plantarum*; where a note informs us, that the hermaphrodite flowers, which the author had once seen on a plant of this Genus, could not afterwards be ever found again. We have therefore changed this instance for the *Ficus*, the only other instance left of this singular case.

tion: but of this he seems confident, that no natural system can ever be formed, without taking in the materials, out of which he has raised his own; and argues the necessity of admitting artificial systems for convenience, till one truly natural shall appear.

By the Sexual System, plants are disposed according to the number, proportion and situation of the Stamens and Pistils: of this method of division will

INTRODUCTION

appear in the following chapters. We shall here only speak in general of the divisions of the System.

The first general division of the whole body of vegetables is into twenty four classes, these are again subdivided into three orders, the first is the

BOTANY, &c.

second part. These more immediately relate to the theory of the Science than the other two, which the

PART THE SECOND,

CHAP. I.

Of the Sexual System, and its Divisions.

THE Sexual System was invented by Linnæus, professor of physic and botany at Upsal. It is founded on the parts of fructification described in the former part of this work: These having been observed with more accuracy, since the discovery of the uses for which nature has assigned them, a new set of principles has been derived from them; by means of which, the distribution of plants has been brought to greater precision, and rendered more conformable to true philosophy in this System, than in any one of those which preceded it. The author of it does not pretend to call it a natural one; he gives it as artificial only, and modestly owns his inability to detect the order pursued by nature in her vegetable productions;

tions : but of this he seems confident, that no natural system can ever be framed, without taking in the materials, out of which he has raised his own ; and urges the necessity of admitting artificial systems for convenience, till one truly natural shall appear *.

By the sexual system, plants are disposed according to the number, proportion and situation of the stamina and pistilla : The manner of their distribution will appear in the following chapters. We shall here only speak in general of the divisions of the system.

The first general division of the whole body of vegetables is into twenty-four *classes* ; these are again subdivided into *orders*, the orders into *genera*, the genera into *species*, and the species into *varieties*, where there are any worthy of note. Of these divisions, we shall treat of the three first only in this second part. These more immediately respect the theory of the science than the other two, which, tho' systematic divisions likewise, have, as our author observes, a nearer relation to the practice ; and it is in these also that the principal improvements in the management of the science are more particularly included.

As the classes and orders of the system will be separately treated of in the following chapters, we shall conclude this introductory one with a table exhibiting their titles at one view, in the order in which they stand in the system, that the reader may have recourse thereto as he finds occasion.

Table

* Linnæus has given *fragmenta methodi naturalis*. Fragments of the natural method, in which he has made a distribution of plants under various orders, putting together in each, such as appear to have a natural affinity to each other. This, after a long and fruitless search after the natural method, he gives as the result of his own speculation, for the assistance of such as may engage in the same pursuit. See his *Classes Plantarum*, page 485. and *Philosophia Botanica*, page 27.

Table of the CLASSES and ORDERS.

CLASSES.	ORDERS.
1. MONANDRIA	1. Monogynia. 2. Digynia.
2. DIANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia.
3. TRIANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia.
4. TETRANDRIA	{ 1. Monogynia. 2. Digynia. 3. Tetragynia.
5. PENTANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia. 4. Tetragynia. 5. Pentagynia. 6. Polygynia.
6. HEXANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia. 4. Tetragynia. 5. Polygynia.
7. HEPTANDRIA	1. Monogynia
8. OCTANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia. 4. Tetragynia.
9. ENNEANDRIA	{ 1. Monogynia. 2. Trigynia. 3. Hexagynia.
10. DECANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia. 4. Tetragynia. 5. Decagynia.
11. DODECANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia. 4. Pentagynia. 5. Dodecagynia.
12. ICOSANDRIA	{ 1. Monogynia. 2. Digynia. 3. Trigynia. 4. Pentagynia. 5. Polygynia.

CLASSES.

ORDERS.

- | | |
|------------------|---|
| | 1. Monogynia. 2. Digynia. |
| 13. POLYANDRIA | 3. Trigynia. 4. Tetragynia. 5. Pentagynia. 6. Hexagynia. 7. Polygynia. |
| 14. DIDYNAMIA | 1. Gymnospermia. 2. Angiospermia. |
| 15. TETRADYNAMIA | 1. Siliculosa. 2. Siliquosa. |
| 16. MONADELPHIA | 1. Triandria. 2. Pentandria. 3. Heptandria. 4. Octandria. 5. Enneandria. 6. Decandria. 7. Endecandria. 8. Dodecandria. 9. Polyandria. |
| 17. DIADELPHIA | 1. Pentandria. 2. Hexandria. 3. Octandria. 4. Decandria. |
| 18. POLYADELPHIA | 1. Pentandria. 2. Dodecandria. 3. Icofandria. 4. Polyandria. |
| 19. SYNGENESIA | 1. Polygamia aequalis. 2. Polygamia superflua. 3. Polygamia frustranea. 4. Polygamia necessaria. 5. Polygamia segregata. 6. Monogamia. |
| 20. GYNANDRIA | 1. Diandria. 2. Triandria. 3. Tetrandria. 4. Pentandria. 5. Hexandria. 6. Octandria. 7. Decandria. 8. Dodecandria. 9. Polyandria. |
| 21. MONOECEIA | 1. Monandria. 2. Diandria. 3. Triandria. 4. Tetrandria. 5. Pentandria. 6. Hexandria. 7. Heptandria. 8. Polyandria. 9. Monadelphia. 10. Syngenesia. 11. Gynandria. |

CLASSES.

ORDERS.

22. DIOECIA

23. POLYGAMIA

24. CRYPTOGAMIA

APPENDIX

- | | |
|---|--|
| { | 1. Monandria. 2. Diandria. |
| { | 3. Tetrandria. 4. Pentandria. 5. Hexandria. |
| { | 6. Octandria. 7. Enneandria. 8. Decandria. |
| { | 9. Dodecandria. 10. Polyandria. 11. Monadelphia. 12. Syngenesia. |
| { | 13. Gynandria. |
| { | 1. Monoecia. 2. Dioecia. 3. Trioecia. |
| { | 1. Filices. 2. Musci. 3. Algæ. 4. Fungi. 3. |
| { | Palmae. |

C H A P.

CHAP. II.

Explanation of the TITLES of the twenty-four CLASSES.

HAVING in the preceding Chapter given the divisions of the system, we shall in this explain the meaning of the terms used for the titles of the classes. As these terms, in the Greek language from whence they are taken, are all expressive of the principal circumstance that obtains in the class to which they are applied, the explanation of them will of itself give us a good insight into the proper characters of the several classes, and the sexual distinctions on which they are founded. However, it will be necessary to say something more particular concerning many of them afterwards in the Chapters we shall allot for each of them separately.

CLASS I. MONANDRIA. 2. DIANDRIA. 3. TRIANDRIA. 4. TETRANDRIA. 5. PENTANDRIA. 6. HEXANDRIA. 7. HEPTANDRIA. 8. OCTANDRIA. 9. ENNEANDRIA. 10. DECANDRIA.—These ten classes, which consist of hermaphrodite flowers, take their denominations from the number of stamina, or male parts of the flowers. The word here compounded with the numerical terms, signifies *a husband*; so that the title Monandria expresses, that the flowers of this class have but *one* husband, that is, one stamen; Diandria, two stamina, Triandria, *three*; Tetrandia, *four*; Pentandia, *five*; Hexandia, *six*; Heptandia, *seven*; Octandia, *eight*; Enneandia, *nine*; and Decandia, *ten*. It must be observed, however, that the flowers being hermaphrodite, as above-mentioned, is in all these classes a necessary condition; for should the female part be wanting, the plant would belong to some other class, notwithstanding the number of stamina may be such as would otherwise refer it to one of these: And

this caution we give once for all to avoid repetitions, that when we use the term hermaphrodite, we mean, that it is a condition not to be dispensed with.

CLASS XL. DODECANDRIA.—This term in the Greek imports that the flowers have *twelve* husbands or stamina. However, the class is not confined to this number, but includes all such Hermaphrodite flowers, as are furnished with any number of stamina from *twelve* to *nineteen* inclusive. No flowers have been yet found to have eleven stamina, which is the reason no class has been allotted to that number.

CLASSXH. ICOSANDRIA.—This term imports, that the flowers have *twenty* husbands or stamina. But here again the title is to be understood with great latitude; for though the plants that belong to this class are rarely found with less than twenty stamina, yet they frequently have a greater number; and they are therefore not to be known with certainty from those of the next class, without having recourse to their classic character; which, not being expressed in the title, we forbear the explanation of here, as we shall give it in the Chapter allotted for this class.

CLASS XIII. POLYANDRIA.—This term imports, that the flowers have *many* stamina.

CLASS XIV. DIDYNAMIA.—This term signifies the *power* or *superiority* of *two*, and is applied to this class, because its flowers have four stamina, of which there are two longer than the rest: This circumstance alone is sufficient to distinguish this class from the fourth, where the four stamina are equal; but the flowers of this class have also their particular character, besides what the title expresses, their corollæ being mostly *ringent*, as will be shewn in its place*.

CLASS XV. TETRADYNAMIA.—This term expresses the *power* or *superiority* of *four*; and accordingly there are in the flowers of this class six stamina, four of which are longer than the rest; which circumstance

* See Chap. 17. See also Part I. Chap. 3. where the term Ringent is explained.

stance distinguishes them from those of the sixth class, where the six stamina are equal: But these flowers have their particular character also, their corollæ being *cruciform* *.

CLASS XVI. MONADELPHIA.—The word here compounded with the numerical term, signifies *a brother*. This relation is employed to express the union of the filaments of the stamina, which in this class do not stand separate, but join at the base, and form one substance out of which they proceed as from a common mother; and the title of the class expresses a *single* brotherhood, meaning that there is but *one* set of stamina so united, which distinguishes the class from the two following ones. The number of stamina in this class is not limited: The flowers have their particular character.

CLASS XVII. DIADELPHIA.—This term expresses *a double* brotherhood, or *two* sets of stamina, united in the manner explained in the preceding class. The number of the stamina is not limited: The flowers of this class have a very particular character, their corolla being *papilionaceous*, as will be shewn in its place †.

CLASS XVIII. POLYADELPHIA.—This term expresses *many* brotherhoods, or sets of Stamina; the flowers have no classic character, farther than is expressed in the title.

CLASS XIX. SYNGENESIA.—This class contains the compound flowers described in part I. Chap. 19. The title signifies *congeneration*, alluding to the circumstance of the stamina; in which, though the filaments stand separate, yet the antheræ, which are the part more immediately subservient to generation, are united in a cylinder, and perform their office.

* See Chap. 18. See also Part I. Chap. 3. where the term Cruciform is explained.

† See Chap. 20. See also part I. Chap. 3. for the explanation of the term Papilionaceous.

office *together*. The classic character will be explained in its place.

CLASS XX. GYNANDRIA.—The term is compounded of two words, that signify *wife* and *husband*; and alludes to the singular circumstance of this class in the flowers of which the stamina grow upon the pistillum; so that the male and female parts are united, and do not stand separate, as in other hermaphrodite flowers.

CLASS XXI. MONOECIA.—The word here, compounded with the numerical term, signifies a *house* or *habitation*.—To understand the application of this title, we must know, that the plants of this class are not *hermaphrodite*, but *androgynous*, the flowers that have the stamina wanting the pistillum, and those that have the pistillum wanting the stamina. Now the term *monoecia*, which signifies a *single house*, alludes to this circumstance; that in this class the male and female flowers are both found on the *same* plant, whereas in the next they have *distinct* habitations.

CLASS XXII. DIOECIA.—This term, which signifies *two houses*, is applied to this class (the plants of which are *male* and *female*) to express the circumstance of the male flowers being on one plant, and the female on another; the contrary of which is the case of the androgynous class *Monoecia* last explained.

CLASS XXIII. POLOGYMIA.—The term signifies plurality of marriages. This class produces, either upon the same or different plants, hermaphrodite flowers, and also flowers of *one sex* only, be it male or female; or flowers of *each sex*; and the latter receiving impregnation from, or giving it to the hermaphrodites, as their sex happens to be, the parts essential to generation in the hermaphrodite flowers do not confine themselves to the corresponding parts within the same flower, but become of *promiscuous* use; which is the reason of giving this title to the class.

CLASS

CLASS XXIV. CRYPTOGRAMIA.—The term signifies *concealment of marriages*; this class consisting of such plants as either bear their flowers concealed within the fruit*, or have them so small, as to be imperceptible.

CHAP. III.

Explanation of the TITLES of the ORDERS.

THE titles of the orders have been given in Chap. i. It remains to explain them.

CLASS I. to XIII. inclusive. The orders of the first thirteen classes take their denominations from the number of the *Pistillum*, or female part of the plant, which is usually reckoned from the *base* of the *style*, if there be any; but if the style be wanting, the number is fixed from the *stigmata*. The Greek word, compounded with the numerical terms in the titles of these orders, signifies a *wife*; Monogynia implies *one wife* or one style; Digynia, *two* styles; Trigynia, *three*; Tetragynia *four*; Pentagynia, *five*; Hexagynia, *six*; Decagynia, *ten*; and Polygynia, *many*. These are the titles that occur in the orders of these thirteen classes; and this general explanation of them will be thought sufficient, as from the table given in the first chapter it appears how they are employed in the classes.

CLASS XIV. DIDYNAMIA. Of the three orders of this class, the two first are founded on a distinction in the fruit. The title of the first order *Gymnospermia* is expressive of such plants as have *naked* seeds; and

* The *Ficus*, whose flowers are within the fruit, used to be put in this class, but is since removed to the 23d class *Polygynia*.

and that of the second *Angiospermia*, of such as have their seeds in a vessel or pericarpium. There was a 3d order *Polypetala*, expressive of such plants as have *many petals*; This order seems to have been established in favour of one genus of plants only, the *Melanthus*, the flowers of which are Polypetalous, though those of all the rest of this class are Monopetalous; but it is now included in the second order.

CLASS XV. TETRADYNAMIA. The two orders of this class are founded on a distinction in the Pericarpium. In the first order *Siliculosæ*, the Pericarpium is a *Silicula*, little Siliqua; which differs from the Siliqua in being round, and having the apex of the dissepiment, which had been the style, prominent beyond the valves, often so far as to be equal in length to the filicula. In the second order, *Siliquosæ*, the pericarpium is a *Siliqua*, which is long and without any remarkable extension of the style.

CLASS XVI. MONADELPHIA. XVII. DIADELPHIA. XVIII. POLYADELPHIA. The orders in these three classes are founded on the number of the stamina in each brotherhood or distinct set of stamina. The titles of the orders being the same that are used for the titles of the early classes of the system, the explanation need not be repeated here.

CLASS XIX. SYNGENESIA. To understand the orders of this class, we must explain what is meant by *Polygamy* in flowers. We have already treated of polygamous plants, and shewn that the term *Polygamous*, as there applied, alluded to the intercommunication of the male or female flowers with the hermaphrodite ones, either upon the same or a distinct plant; but in respect to flowers, the term is applied to a single flower only; for the flowers of this class being compound; a polygamy arises from the intercommunication of the several florets in one and the same flower. Now the polygamy of flowers, in this sense of the

the word, affords four cases, which are the foundation of the four first orders of this class. 1st Order, *Polygamia æqualis*, equal polygamia, is when all the florets are hermaphrodite. 2d Order, *Polygamia superflua*, superfluous polygamy, when some of the florets are hermaphrodite, and others female only; for in this case, as the fructification is perfected in the hermaphrodites, the addition of the females is a superfluity. 3d Order, *Polygamia frustranea*, frustraneous or ineffectual Polygamy, when some of the florets are hermaphrodite, and others neuter; for in this case the addition of the neuters is of no assistance to the fructification. 4th Order, *Polygamia necessaria*, necessary polygamy, when some of the florets are male, and the rest female; for in this case there being no hermaphrodites, the polygamy arising from the composition of the florets of different sexes is necessary to perfect the fructification. 5th Order, *Polygamia segregata*. The title signifies to be separated; the plants of this order having partial cups growing out of the common calyx which surround and divide the flosculi or florets. 6th Order, *Monogamia*: the title signifies a single marriage, and is opposed to the *Polygamia* of the four other orders; for in this, tho' the antheræ are united, which is the essential character of the flowers of this class, the flower is simple, and not compounded of many florets, as in the other orders.

CLASS XX. GYNANDRIA. The orders of this class are founded on the number of stamina. The titles have been already explained.

CLASS XXI. MONOECIA. XXII. DIOECIA. These two classes, whose flowers have no fixed character but that of not being hermaphrodite, take in the characters of almost every other class; and the orders have accordingly been disposed under the titles of those classes, to which their respective flowers would have belonged, if the stamina and pistillum had been under the same covers: as the explanation of all these

titles has been given in the last chapter in the explanation of the classes, it need not be repeated here.

CLASS XXIII. POLYGAMIA. In this class the titles of the two first orders are the same with the titles of the twenty-first and twenty-second classes, and are to be understood in the same manner, that is, 1. *Monœcia* when the polygamia is on the same plant, and 2. *Dioeria* when it is on distinct plants. The order *Triœcia* has been established in favour of two genera the *Ceratonia* and *Ficus*, in which the polygamy is on three distinct plants, one producing male flowers, another female, and a third hermaphrodite or androgynous.

CLASS XXIV. CRYPTOGAMIA. The orders of this class are, 1. *Filices*, ferns. 2. *Musci*, mosses. 3. *Algæ*, flags, and 4. *Fungi*, mushrooms. As the explanation of the character of these orders will come more properly into the chapter that treats particularly of this class, we shall content ourselves here with having interpreted the titles as above.

CH A P. IV.

Of the first Class MONANDRIA.

THIS Class consists of such plants as bear *hermaphrodite* flowers, furnished with but *one* stamen. The orders are two, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* style. This order contains fourteen genera, distinguished into, 1. *scitamineæ*, such plants as have the flowers placed above the germen, and the pericarpium divided into loculaments; of which there are ten, viz, *Renealmia*, *Ganna*, *Amomum*, *Costus*, *Alpinia*, *Maranta*, *Curcuma*, *Myrosma*, *Kæmpferia*, and *Thalia*. 2. *Monospermous*, such as have a *single* seed; of which there are four, viz. *Boerhavia*, *Salicornia*, *Hippuris*, and *Pollichia*.

ORDER

ORDER II. DIGYNIA, comprehending such plants as have *two* styles. This order contains four genera, divided into 1. herbs; of which there are three viz. Corispermum, Callitriche and Blitum; and 2. grasses; of which there is one genus, viz. Cinna.

C H A P. V.

Of the second Class DIANDRIA.

THIS class consists of such plants as bear *hermaphrodite* flowers, furnished with *two* stamina. The orders are three, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* style. This order contains thirty genera, distinguished into, 1. such as have *regular* monopetalous corollæ; of which there are eight, viz. Nyctanthes, Jasminum, Ligustrum, Phillyrea, Olea, Chionanthus, Syringa, and Eranthemum. 2. Such as have *irregular* monopetalous corollæ, and the fruit *angiospermous*, the seeds in a vessel; of which there are nine, viz. Veronica, Pæderota, Justicia, Dianthera, Gratiola, Pinguicula, Schwenkia, Calceolaria, and Utricularia. 3. Such as have *irregular* monopetalous corollæ, and the fruit *gymnospermous*, the seeds naked; of which there are nine, viz. Verbena, Lycopus, Amethystea, Cunila, Ziziphora, Monarda, Rosmarinus, Salvia, and Collinsonia. 4. Such as have polypetalous corollæ; of which there is one, viz. Dialium. 5. Such as have the flowers *above* the germen, of which there are three, viz. Morina, Circæa, and Globba.

ORDER II. DIGYNIA, comprehending such plants as have *two* styles. This order contains two genera, viz. Anthoxanthum, and Crypsis.

ORDER III. TRIGYNIA, comprehending such plants as have *three* styles. There is but one genus of this order, viz. Piper.

C H A P. VI.

Of the third Class TRIANDRIA.

THIS class consists of such plants as bear *hermaphrodite* flowers, furnished with *three* Stamina. The orders are three, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* style. This order contains thirty-five genera, distinguished into, 1. Those whose flowers are seated above the germen; of which there are eleven, viz. Valeriana, Melothria, Crocus, Iris, Moræa, Antholyza, Gladiolus, Witsenia, Ixia, Aristeia, and Dilatris. 2. Those with flowers under the germen; of which there are fifteen, viz. Commelina, Wachendorfia, Hippocratea, Loeslingia, Willichia, Tamarindus, Callisia, Rumphia, Cneorum, Xyris, Comocladia, Olax, Rotala, Ortégia, and Polycnemum. 3. Such as have flowers like those of the grasses, with valves of that sort of glume or husk which serves as a calyx; of which there are nine, viz. Schoenus, Cyperus, Scirpus, Eriophorum, Lygeum, Nardus, Kylingia, Fuirena, and Pommereulla.

ORDER II. DIGYNIA, comprehending such plants as have *two* styles. This order contains thirty-one genera, divided into four sections. The first includes such genera as have the flowers loose or scattered and one flower on a peduncle; of which there are fifteen, viz. Perotis, Saccharum, Bobartia, Panicum, Cornucopiae, Aristida, Alopecurus, Phleum, Phalaris, Paspalum, Milium, Agrostis, Pastyliis, Stipa, and Lagurus. 2. Those genera with flowers scattered and two flowers on a peduncle; of this section there are two, viz. Aira and Melica. 3. Those with more than two flowers on a peduncle, scattered, of which there are seven, viz. Uniola, Briza, Poa, Festuca, Bromus, Avena, and Arundo. 4. Flowers in a spike on a subulated

subulated receptacle of which there are seven, viz. Secale, Triticum, Hordeum, Rottbollia, Elymus, Lolium, and Cynosurus.

ORDER III. TRIGYNIA, comprehending such plants as have *three* styles. This order contains ten genera, distinguished into 1. Those with flowers *below*; of which there are nine, viz. Holosteum, Polycarpon, Lechea, Montia, Mollugo, Minuartia, Queria, Koenigia and Triplaris. 2. Contains one genus, Proserpinaca, with flowers *above*.

CHAP. VII.

Of the fourth Class TETRANDRIA.

THIS class consists of such plants as bear *hermaphrodite* flowers, furnished with *four* stamina. The flowers of this class may be known from those of the fourteenth by this distinction, that the stamina are of *equal* lengths; whereas in those of the fourteenth, which have four stamina likewise, there are *two long* and *two short*: the orders of this class are three, viz.

ORDER. I. MONOGYNIA, comprehending such plants as have but one style. This order contains seventy one genera, distinguished into 1. Those with monopetalous, monospermous flowers, placed below; of which there are two, viz. Protea and Globularia. 2: Those with monopetalous, monospermous flowers, placed above, called in natural orders *Aggregatæ*; of which there are five, viz. Cephalanthus, Dipfacus, Scabiosa, Knautia, and Allionia. 3. Those with monopetalous flowers placed below a single fruit; of which there are thirteen, viz. Aquartia, Callicarpa, Aegiphila, Banksia, Scoparia, Centunculus, Plantago, Polypremum, Buddleja, Exacum, Penaea, Witheringia

ingia and Blaeria. 4. Those with monopetalous flowers placed above a single fruit; of which there are nine, viz. Pavetta, Ixora, Petesia, Catesbæa, Mitchella, Hedyotis, Oldenlandia, Mannettia and Sanguisorba. 5. Those with monopetalous flowers placed below a double fruit; of which there are two, viz. Houstonia and Scabrita. 6. Those with monopetalous flowers, above a double fruit, called in Natural Orders Stellatæ; of which there are eight, viz. Rubia, Galium, Asperula, Sherardia, Spermacoce, Knoxia, Diodia and Crucianella. 7. Flowers monopetalous, below the fruit which has four cells with a single seed in each; of this there is one genus, viz. Siphonanthus. 8. Those of flowers with four petals, below; of which there are eleven, viz. Epimedium, Monetia, Skimmia, Rhacoma, Othera, Orica, Ptelea, Samara, Curtisia, Fagara and Ammannia. 9. Those of flowers with four petals, above; of which there are five, viz. Trapa, Cissus, Cornus, Ludwigia and Santalum. 10. Flowers incomplete (i. e. wanting either the calyx or corolla) below; of which there are ten, viz. Chloranthus, Struthiola, Crameria, Rivina, Embotrium, Salvadora, Camphorosma, Alchemilla, Dorstenia, and Cometes. 11. Flowers incomplete, above, of which there are five, viz. Sirium, Acaena, Isnardia, Elaeagnus, and Gonocarpus.

ORDER II. DIGYNIA, comprehending such plants as have two Styles. This order contains eight genera, viz. Aphanes, Cruzita, Bufonia, Hamamelis, Cuscuta, Hypecoum, Gomozia and Galopina.

ORDER III. TETRAGYNIA, comprehending such plants as have four styles. This order contains seven genera, viz. Ilex, Coldenia, Potamogeton, Ruppia, Sagina, Tillæa and Myginda.

C H A P. VIII.

Of the fifth Class PENTANDRIA.

THIS class consists of such plants as bear Hermaphrodite flowers, furnished with five stamina. The orders are six.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* Style*. This order contains one hundred and fifty-nine genera, distinguished into, 1. Those with monopetalous flowers placed below, monospermous; of which there are three, viz. Mirabilis, Weigtea, and Plumbago. 2. Those with monopetalous flowers, placed below, dispermous; of which there are two, viz. Cerinthe and Messerschmidia. 3. Those with monopetalous flowers placed below, tetraspermous; of which there are twelve, viz. Echium, Heliotropium, Pulmonaria, Lithospermum, Onosma, Symphytum, Borago, Lycopsis, Asperugo, Cynoglossum, Anchusa, and Myosotis. This and the second section contain those plants which in natural arrangements are called *Asperifolia*. 4. Plants with monopetalous flowers placed below, pentaspermous; of which there is but one genus, viz. Nolana. 5. Plants with monopetalous flowers placed below, angiospermous, the seeds contained in a capsule; of which there are seventy-four, viz. Coris, Hydrophyllum, Galax, Cortusa, Anagallis, Eysimachia, Cyclamen, Dodecatheon, Soldanella, Primula, Androsace, Aretia, Hottonia, Menyanthes, Doræna, Allemanda, Theophrasta, Sheffieldia, Retzia, Spigelia, Ophioriza, Convolvulus, Lisianthus, Patagonula, Datura, Hyoscyamus, Nicotiana, Verbascum, Chironia, Diapensia, Phlox, Polemonium, Ipomoea, Brodiaea, Azalea,

* The berries of the monopetalous plants of this order are for the most part poisonous.

Azalea, Epacris, Ceropogia, Nerium, Echites, Pergularia, Plumieria, Cameraria, Tabernaemontana, Vinca, Ignatia, Carissa, Jacquinia, Laugeria, Paederia, Varronia, Cordia, Ehretia, Tournefortia, Rauwolfia, Cerbera, Arduina, Myrsine, Bladhia, Cestrum, Brunfelsia, Randia, Fagraea, Strychnos, Capsicum, Solanum, Physalis, Atropa, Ellisia, Lycium, Menais, Solandra, Sideroxylon, Chrysophyllum, and Ardisia.

6. Plants with monopetalous flowers placed above; of which there are twenty-five, viz. Samolus, Bellonia, Virecta, Macrocnemum, Rondeletia, Cinchona, Portlandia, Roella, Phyteuma, Campanula, Scaevola, Trachelium, Matthiola, Morinda, Psycotria, Coffea, Chiococca, Gardenia, Genipa, Lonicera, Triosteum, Plocama, Mussaenda, Hamellia, Erithalis. 7. Those with pentapetalous flowers placed below; of which there are twenty-four, viz. Hirtella, Rhamnus, Ceanothus, Celastrus, Euonymus, Leea, Vitis, Elaeodendron, Corynocarpus, Mangifera, Cedrela, Calodendron, Buttnera, Diosma, Pittosporum, Havenia, Claytonia, Roridula, Itea, Sauvagesia, Caroxylon, Brunia, Kuhnia, and Nauclea. 8. Those with pentapetalous flowers placed above; of which there are eleven, viz. Ribes, Escallonia, Hedera, Plectronia, Phylica, Gronovia, Heliconia, Lightfootia, Argophyllum, Lagoecia, and Conocarpus. 9. Those with incomplete flowers placed below; of which there are six, viz. Strelitzia, Achyranthes, Celosia, Chenolea, Illecebrum, and Glaux. 10. Those with incomplete flowers placed above; of which there is but one, viz. Thesium.

ORDER II. DIGYNIA, comprehending such plants as have *two* Styles. This order contains seventy-five genera; distinguished into, 1. Those with monopetalous flowers, placed below; of which there are fourteen, viz. Stapelia, Cynanchum, Periploca, Apocynum, Asclepias, Melodinus, Swertia, Gentiana, Cressa, Hydrolea, Porana, Schrebera, Steris, and Falckia. 2. Those with pentapetalous flowers, placed below;

of

of which there are six, viz. Velezia, Lineonia, Nama, Heuchera, Bumalda, and Anabasis. 3. Those with pentapetalous flowers, placed above, with the seeds in a capsule; of this there is only one, viz. Vahlia. 4. Those plants called in natural arrangements the Umbellatæ* having pentapetalous flowers, placed above, with two seeds. They are subdivided, (1.) into such as have both an universal and partial involucre; of which there are thirty, viz. Phyllis, Eryngium, Hydrocotyle, Sanicula, Astringia, Heracleum, Oenanthe, Echinophora, Caucalis, Artedia, Daucus, Tordylium, Laserpitium, Peucedanum, Ammi, Hasselquistia, Conium, Bunium, Athamanta, Bupleurum, Sium, Seselinum, Cuminum, Ferula, Crithmum, Bubon, Cachrys, Ligusticum, Angelica, and Sison. (2.) Those with partial involucre only; of which there are eight, viz. Æthusa, Coriandrum, Scandix, Chærophylloides, Phellandrium, Imperatoria, Sefeli, and Cicuta. (3.) Such as have neither partial nor universal involucre; of these there are nine genera, viz. Smyrnum, Carum, Thapsia, Pastinaca, Anethum, Ægopodium, Apium, Pimpinella, and Cussonia. 5. Those with incomplete flowers, that is, wanting the Corolla; of which there are seven, viz. Salsola, Chenopodium, Beta, Herniaria, Gomphrena, Bofea, and Ulmus.

ORDER III. TRIGYNIA, comprehending such plants as have *three* Styles. This order contains eighteen genera, distinguished into, 1. such as have flowers placed above; of which there are two genera, viz. Viburnum and Sambucus. 2. Such as have the flowers below; of which there are sixteen, viz. Semecarpus, Rhus, Cassia, Spathelia, Staphylea, Tamarix, Drypis, Turnera, Sarothra, Alfine, Telephium, Corrigiola, Portulacaria, Pharnaceum, Xylophylla, and Basella.

I

ORDER

* In dry soils the umbelliferous plants are aromatic, warm, resolvent, and carminative, but in moist places poisonous. The virtue is in the roots and seeds.

ORDER IV. TETRAGYNIA, comprehending such plants as have *four* Styles. This order contains two genera, viz. Parnassia and Evolvulus.

ORDER V. PENTAGYNIA, comprehending such plants as have *five* Styles, distinguished into, 1. Those with flowers above; of which there is one genus, viz. Aralia. 2. Those with flowers below; of which there are nine genera, viz. Crassula, Gisekia, Linum, Aldrovanda, Drosera, Mahernia, Commerfonia, Sibbaldia, and Statice.

ORDER VI. POLYGYNIA, comprehending such plants as have more than five Styles. This order contains two genera, viz. Myofurus and Zanthoriza.

C H A P. IX.

Of the sixth Class HEXANDRIA.

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *six* Stamina. The flowers of this class may be known from those of the fifteenth by this distinction, that the stamina are of *equal* length; whereas in those of the fifteenth, which have six stamina likewise, there are *four long* and *two short*. The orders of this class are five, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* Style. This order contains sixty-eight genera, divided into, 1. Such as are furnished with both calyx and corolla; of which there are seventeen genera, viz. Licuala, Bromelia, Pitcairnia, Tillandsia, Burmannia, Tradescantia, Bursera, Frankenia, Loranthus, Hillia, Richardia, Berberis, Leontice, Prinos, Canarina, Nandina, and Achras. 2. Such as have flowers with a spatha, *or* with a husk; of

of which there are fifteen, viz. Haemanthus, Leucorum, Galanthus, Narcissus, Pancratium, Amaryllis, Cyrtanthus, Crinum, Pontederia, Agapanthus, Bulbocodium, Tulbagia, Allium, Aphyllanthes, and Hypoxis. 3. Such as have naked flowers, i. e. without the calyx; of these there are thirty-one, viz. Alstroemeria, Gethyllis, Lanaria, Agave, Aloe, Aletris, Polianthes, Convallaria, Hyacinthus, Asphodelus, Hemerocallis, Chlamydia, Lachenalia, Eucomis, Anthericum, Ornithogalum, Scilla, Cyanella, Dracaena, Asparagus, Polia, Gloriosa, Erythronium, Uvularia, Fritillaria, Liliun, Tulipa, Yucca, Albuca, Lindera, and Massonia. 4. Such as have incomplete flowers; of which there are five, viz. Orontium, Acorus, Calamus, Juncus, and Peplis.

ORDER II. DIGYNIA, comprehending such plants as have *two* Styles; of this order there are four genera, viz. Atraphaxis, Gahnia, Oryza, and Erharta.

ORDER III. TRIGYNIA, comprehending such plants as have *three* Styles. This order contains ten genera, divided, i. into such as have flowers below; of which there are nine genera, viz. Colchicum, Melanthium, Medeola, Helonias, Trillium, Triglochin, Rumex, Scheuchzeria, and Wurmbea. 2. Those with flowers above; of which there is one genus, viz. Flagellaria.

ORDER IV. TETRAOYNIA, comprehending such plants as have *four* Styles. Of this order there is but one genus, viz. Petiveria.

ORDER V. POLYGYNIA, comprehending such plants as have *many* Styles. Of this order there is but one genus, viz. Alisma.

C H A P. X.

Of the seventh Class HEPTANDRIA.

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *seven* Stamina. The orders of this class are four, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* Style. This order contains three genera, viz. Trientalis, Disandra, and Æsculus.

ORDER II. DIGYNIA, comprehending such plants as have *two* Styles. This order contains one genus, viz. Limeum.

ORDER III. TETRAGYNIA, comprehending such plants as have *four* Styles. Of this order there are two genera, viz. Saururus and Aponogeton.

ORDER IV. HEPTAGYNIA, containing such plants as have *seven* Styles. Of this order there is only one genus, viz. Septas.

C H A P. XI.

Of the eighth Class OCTANDRIA.

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *eight* Stamina. The orders are four, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* Style. Of this order there are thirty-three genera, distinguished into, 1. Those with complete flowers; of which there are twenty-six, viz. Mimulus, Tropaeolum, Backea, Memecylon, Combretum, Ophira, Gaura, Epilobium, Oenothera, Rhexia,

Rhexia, Osbeckia, Griflea, Guarea, Antichorus, Allophyllus, Jambolifera, Lawsonia, Melicocca, Ximonia, Amyris, Fuchsia, Kœlreuteria, Chlora, Michauxa Vaccinium, and Erica. 2. Those with incomplete flowers; of which there are seven, viz. Cnidia, Lachnaea, Dirca, Daphne, Passerina, Stellera, and Dodonaea.

ORDER II. DIGYNIA, comprehending such plants as have *two* styles. Of this order there are five genera, viz. Weinmannia, Moehringia, Codia, Schmiedelia, and Galenia.

ORDER III. TRIGYNIA, comprehending such plants as have *three* Styles. Of this order there are five genera, viz. Paullinia, Cardiospermum, Sapindus, Coccoloba, and Polygonum.

ORDER IV. TETRAGYNIA, comprehending such plants as have *four* Styles. Of this order there are four genera, viz. Adoxa, Elatine, Paris, and Haloragis.

C H A P. XII.

Of the ninth Class ENNEANDRIA.

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *nine* Stamina. The orders are three, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* Style. Of this order there are four genera, viz. Laurus, Tinus, Anacardium, and Cassia.

ORDER II. TRIGYNIA, comprehending such plants as have *three* Styles. Of this order there is but one genus, viz. Rheum.

ORDER

ORDER III. HEXAGYNIA, comprehending such plants as have *six* Styles. Of this order there is but one genus, viz. Butomus.

C H A P. XIII.

Of the tenth Class DECANDRIA.

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *ten* Stamina. The orders are five, viz.

ORDER I. MONOGYNIA, comprehending such plants as have *one* Style. This order contains fifty-six genera, distinguished into, 1. Those with polypetalous irregular flowers; of which there are fourteen, viz. Sophora, Anagyris, Cercis, Bauhinia, Hymenaea, Poinciana, Myroxylon, Parkinsonia, Caesalpinia, Toluifera, Cassia, Guilandina, Dictamnus, and Rhodora. 2. Those with polypetalous and equal flowers; of which there are twenty-nine, viz. Cynometra, Profopis, Adenanthera, Haematoxylon, Trichilia, Turraea, Melia, Swietenia, Ekebergia, Guajacum, Schottia, Ruta, Tribulus, Fagonia, Zygophyllum, Quassia, Thryallis, Limonia, Heisteria, Quisqualis, Monotropa, Clethra, Pyrola, Ledum, Dionaea, Muraya, Chalcas, Melastoma, and Jussieua. 3. Those with monopetalous, equal flowers; of which there are nine, viz. Codon, Andromeda, Rhododendron, Kalmia, Epigaea, Gualteria, Arbutus, Styrax, and Inocarpus. 4. Those with apetalous or incomplete flowers; of which there are four, viz. Dais, Samyda, Bucida, and Copaifera.

ORDER II. DIGYNIA, comprehending such plants as have *two* Styles. Of this order there are twelve genera,

genera, viz. Scleranthus, Trianthema, Chrysosplenium, Royena, Hydrangea, Saxifraga, Tiarella, Mittella, Cunonia, Gypsophila, Saponaria, and Dianthus.

ORDER. III. TRIGYNIA, comprehending such plants as have *three* Styles. Of this order there are eleven genera, viz. Arenaria, Stellaria, Cucubalus, Silene, Cherleria, Deutzia, Garidella, Erythroxylon, Malpighia, Banisteria, and Triopteris.

ORDER IV. PENTAGYNIA, comprehending such plants as have *five* Styles. Of this order there are fourteen genera, viz. Cotyledon, Sedum, Penthorum, Bergia, Oxalis, Lychnis, Spergula, Cerastrum, Agrostemma, Spondias, Averrhoa, Grielum, Suriana, and Forskohlea.

ORDER V. DECAGYNIA, comprehending such plants as have *ten* Styles. Of this order there are two genera, viz. Neurada and Phytolacca.

C H A P. XIV.

Of the eleventh Class DODECANDRIA.

THIS class, notwithstanding its title, which is expressive of twelve stamina, consists of such plants as bear hermaphrodite flowers, furnished with any number of stamina from twelve to nineteen inclusive *. The orders are five, viz.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* Style. This order contains twenty-four genera, viz. Bocconia, Hudsonia, Afrum,

* Tormentilla is an exception, belonging to the next class, though it has but sixteen stamina. The characters of the fructification in the next class over-rule the number of the male part expressed in its title.

rum, Halefia, Tomex, Rhizophora, Apactis, Garcia, Crataeva, Triumfetta, Eurya, Peganum, Nitria, Vatica, Canella, Portulaca, Cuphea, Lythrum, Ginora, Blakea, Befaria, Bassia, Decumaria, and Gethyllis.

ORDER II. DIGYNIA, comprehending such plants as have *two* Styles. Of this order are two genera, viz. Heliocarpus, and Agrimonia.

ORDER III. TRIGYNIA, comprehending such plants as have *three* Styles. This order contains six genera, viz. Reseda, Euphorbia, Aristotelia, Vifnea, Tacca, and Pallasia.

ORDER IV. PENTAGYNIA, comprehending such plants as have *five* styles; of which there is one genus, viz. Glinus.

ORDER V. DODECAGYNIA, comprehending such plants as have *twelve* styles; of which there is one genus, viz. Sempervivum.

CHAP. XV.

Of the twelfth Class ICOSANDRIA.*

THIS class consists of such plants as bear hermaphrodite flowers, of the following characters, viz. 1. A calyx monophyllous and concave. 2. The corolla fastened by its claws to the inner side of the calyx. 3. The stamina twenty or more. As the number of stamina in this class, notwithstanding its title, is not limited, an attention must be had to the two first characters, to distinguish the flowers from those of the next class, with which they might otherwise be confounded. The orders are five, viz.

ORDER

* This class furnishes the fruits most in esteem.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* style. This order contains eleven genera, viz. Cactus, Philadelphus, Psidium, Eugenia, Myrtus, Punica, Amygdalus, Prunus, Chrysobalanus, Eucalyptus, and Plinia.

ORDER II. DIGYNIA, comprehending such plants as have *two* styles. Of this order there is but one genus, viz. Cratægus.

ORDER III. TRIGYNIA, comprehending such plants as have *three* styles. This order contains two genera, viz. Sorbus and Sésuvium.

ORDER IV. PENTAGYNIA, comprehending such plants as have *five* styles. Of this order there are six genera, viz. Mespilus, Pyrus, Tetragonia, Mesembryanthemum, Aizoon and Spiræa.

ORDER V. POLYGYNIA, comprehending such plants as have *many* styles. This order contains nine genera, viz. Rosa, Rubus, Fragaria, Potentilla, Tormentilla, Geum, Dryas, Comarum, and Calycanthus.

CHAP. XVI.

Of the thirteenth Class POLYANDRIA.*

THIS class contains such plants as bear hermaphrodite flowers, furnished with *many* stamina. The distinction between this class and the twelfth may be known by having recourse to the characters of the twelfth class given in the preceding chapter. The orders are seven, viz.

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ORDER

* The fruits of this class are often poisonous; which makes it necessary carefully to distinguish them from those of the last, which abounds in eatable fruit.

ORDER I. MONOGYNIA, comprehending such plants as have but *one* style. This order contains forty-two genera, distinguished into 1. Such as have monopetalous flowers, of which there are two, viz. Marcgravia and Ternstroemia. 2. Such as have flowers of three petals, of which there is one genus, viz. Trilix. 3. Such as have flowers with four petals, of which there are twelve, viz. Rheedia, Mamea, Papaver, Chelidonium, Capparis, Actaea, Cambodia, Callophyllum, Sparmannia, Vallea, Grias and Caryophyllus. 4. Such as have flowers with five petals, of which there are thirteen, viz. Loofa, Menzelia, Vateria, Cleyera, Cistus, Corchorus, Sarracenia, Tilia, Gordonia, Apeiba, Ochna, Muntingia and Elaeocarpus. 5. Such as have flowers with six petals, of which there are four, viz. Argemone, Lagerstroemia, Thea and Lecythis. 6. Such as have flowers with *many* petals, of which there are four, viz. Sanguinaria, Podophyllum, Bixa and Nymphaea. 7. Such as have flowers without any petals, of which there are six, viz. Sloanea, Trewia, Prockia, Laetia, Seguieria and Delima.

ORDER II. DIGYNIA, comprehending such plants as have *two* styles. Of this order there are four genera, viz. Calligonum, Fothergilla, Curatella and Paeonia.

ORDER III. TRIGYNIA, comprehending such plants as have *three* styles. This order contains two genera, viz. Delphinium and Aconitum.

ORDER IV. TETRAGYNIA, comprehending such plants as have *four* styles. Of this order there are three genera, viz. Cimicifuga, Tetracera and Caryocar.

ORDER V. PENTAGYNIA, comprehending such plants as have *five* styles. This order contains four genera, viz. Aquilegia, Nigella, Reaumuria and Brathys.

ORDER VI. HEXAGYNIA, comprehending such plants as have *six* styles. Of this order there is but one genus, viz. Stratiotes.

ORDER VII. POLYGYNIA, comprehending such plants

plants as have *many* styles. This order contains twenty genera, viz. Houtuynia, Hydrastis, Atragene, Clematis, Thalictrum, Isopyrum, Helleborus, Caltha, Anemone, Michelia, Trollius, Wintera, Uvaria, Annona, Liriodendrum, Magnolia, Dillenia, Ranunculus, Illicium and Adonis.

C H A P. XVII.

Of the fourteenth Class DIDYNAMIA.

THIS class consists of such plants as bear Hermaphrodite flowers, furnished with four stamina; *two* of which are longer than the rest: this circumstance would suffice to distinguish it from the fourth class, in which the four stamina are *equal*; however, as the flowers of this class have a particular structure, there are general characters which will nearly serve for the whole class; and these we shall give at length.

Characters of the Class DIDYNAMIA.

CALYX---A perianthium, monophyllous, erect, tubulate, quinquefid, with segments for the most part unequal and persisting.

COROLLA---Monopetalous and erect, the base of which contains the honey, and does the office of a nectarium. The upper lip strait; the lower spreading and trifid. The middle lacinia the broadest.

STAMINA---Four filaments, subulate, inserted into the tube of the corolla, and inclined towards the back thereof. The two inner and nearest the shortest. All of them parallel, and rarely exceeding the length of the corolla. The antheræ lodged under the upper lip

of the corolla in pairs ; in each of which respectively the two antheræ approach each other.

PISTILLUM--The germen commonly above the receptacle. The style single, filiform, bent in the same manner as the filaments, usually placed within them, a little exceeding them in length, and slightly curved towards the summit. The stigma for the most part emarginate.

PERICARPIUM--Either wanting (see the first order) or, if present, usually bilocular (see the second order).

SEEDS--If no pericarpium, four, lodged within the hollow of the calyx, as in a capsule ; but if there be a pericarpium, more numerous, and fastened to a receptacle placed in the middle of the pericarpium.

The flowers of this class are for the most part almost upright, but inclining a little at an acute angle from the stem, that the corolla may more easily cover the antheræ, and that the pollen may fall on the stigma, and not be soaked with the rain. The essential character is in the four stamina ; of which the two nearest are shorter, and all four close to each other, and transmitted with the single style of the pistillum through a corolla that is unequal.

The Orders of this class are two, viz.

ORDER I. GYMNOSPERMIA *, comprehending such plants as have naked seeds. This order has these farther characters, viz. the seeds four, excepting *Phryma*, which is monospermous ; and the stigma bipartite and acute, with the lower lacinia reflected. It contains thirty-six genera, distinguished into, 1. Such as have the calyx subquinquefid ; of which there are twenty, viz. *Perilla*, *Leonurus*, *Glechoma*, *Bystropogon*, *Hysopus*,

* The plants of this order are scented, and are accounted cephalic and resolvent. The virtue is in the leaves. They are the Labiati (lip'd plants) of Tournefort ; and Verticillates (plants that flower at the joints) of Ray, Hist. Plant. 508.

Sopus, *Mentha*, *Sideritis*, *Lavandula*, *Teucrium*, *Ajuga*, *Phlomis*, *Betonica*, *Lamium*, *Galeopsis*, *Stachys*, *Nepeta*, *Satureja*, *Ballota*, *Marrubium*, and *Molucella*. And 2. Such as have the calyx bilabiate, divided into two lips, of which there are sixteen, viz. *Scutellaria*, *Thymus*, *Ocimum*, *Plectranthus*, *Prunella*, *Cleonia*, *Trichostema*, *Dracocephalum*, *Origanum*, *Clinopodium*, *Thymbra*, *Melittis*, *Melissa*, *Horminum*, *Prasium* and *Phryma*.

ORDER II. ANGIOSPERMIA, comprehending such plants as have the seeds in a pericarpium; which circumstance is constant, and distinguishes this order from the last under every form: to this character may be added that of a stigma, commonly obtuse. This order contains seventy one genera, distinguished into 1. Such as have monopetalous flowers, with the calyx as it were gaping, of which there is but one genus, viz. *Castilleja*. 2. Such as have monopetalous flowers with the calyces bifid; of these there are seven, viz. *Obolaria*, *Orobanche*, *Hebenstretia*, *Torenia*, *Acanthus*, *Premna* and *Crescentia*. 3. Such as have monopetalous flowers, and calyces trifid, of which there is one genus, viz. *Halleria*. 4. Such as have monopetalous flowers with the calyces quadrifid, of which there are twelve genera, viz. *Selago*, *Lippia*, *Lathraea*, *Bartisia*, *Euphrasia*, *Rhinanthus*, *Melampyrum*, *Schwalbea*, *Barleria*, *Loeselia*, *Gmelina* and *Lantana*. 5. Such as have monopetalous flowers, and calyces quinquefid, of which there are forty six genera, viz. *Avicennia*, *Tozzia*, *Limosella*, *Brouallia*, *Lindernia*, *Vandellia*, *Gesneria*, *Scrophularia*, *Stemodia*, *Celsia*, *Hemimeris*, *Sibthorpia*, *Capraria*, *Digitalis*, *Bignonia*, *Ruellia*, *Buchneria*, *Erinus*, *Petraea*, *Manulea*, *Antirrhinum*, *Columnea*, *Gerardia*, *Pedicularis*, *Mimulus*, *Dodartia*, *Chelone*, *Pentstemon*, *Sesamum*, *Cyrilla*, *Gloxinia*, *Martynia*, *Craniolaria*, *Pedaliun*, *Amasonia*, *Linnaea*, *Bontia*, *Cornutia*, *Clerodendron*, *Volkameria*, *Citharexylon*, *Ovieda*, *Millingtonia*, *Vitex*, *Duranta* and *Besleria*. 6. Such as have monopetalous

nonpetalous flowers, and the calyces multifid, of which there are three, viz. Hyobanche, Cymbaria, and Thunbergia. 7. Such as have flowers with many petals, of which there is one genus, viz. Melianthus.

C H A P. XVIII.

*Of the fifteenth Class TETRADYNAMIA *.*

THIS class consists of such plants as bear Hermaphrodite flowers, furnished with *six* stamina, *two* of which are shorter than the rest, by which last circumstance it may be distinguished from the sixth class, whose flowers have *six equal* stamina. The flowers of this class are of a particular structure, answering to the character following.

Characters of the Class TETRADYNAMIA.

CALYX.--A perianthium tetraphyllous and oblong; the leaves of which are ovato-oblong, concave, obtuse, conniving, gibbous downwards at the base, the opposite ones equal and deciduous. The calyx in these

* These are the Cruciformes, (cross shaped flowers) of Tournefort; and Siliculæ and Siliquæ (plants that have a Silicula and Siliqua) of Ray, Hist. Plant. 777. This class is truly natural, and has been assumed as such by all systematists, tho' individuals have often added one or more genera to it, contrary to nature. Linæus thinks he has given no wrong one, unless it be the Cleome. The distinction into Siliculose and Siliquose is admitted by all. The plants are held to be Antiscorbutic and Diuretic. The taste in most is watery, mixt with a sharpness. They commonly lose their quality when dried. The essential character of the several genera in this class depends commonly on the situation of the nectariferous Glandule.

these flowers is a nectarium : which is the reason of the base being gibbous.

COROLLA---Called *cruciform*. Four equal petals. The claws plano-subulate, erect, somewhat longer than the calyx. The limb plane. The Laminæ widening outwards, obtuse, the sides hardly touching one another. The insertion of the petals is in the same circle with the stamina.

STAMINA---The filaments six, and subulate ; of which two that are opposite are of the length of the calyx ; the other four somewhat longer, but not so long as the corolla, the antheræ oblong, acuminate, thicker at the base, erect, and with their tops leaning outwards. There is a nectariferous glandule, which in the different genera has various appearances ; it is seated close to the stamina, and particularly to the two shorter ones, to whose base it is fastened ; and these have a light curvature to prevent their pressing upon it, whereby those filaments become shorter than the rest.

PISTILLUM---The germen above the receptacle increasing daily in height. The style either of the length of the longer stamina, or wanting. The stigma obtuse.

PERICARPIUM---A Siliqua of two valves, often bilocular, opening from the base to the top : the dissepiment projecting at the top beyond the valves, the prominent part thereof having before served as a style.

SEEDS---Roundish, inclining downwards, alternately plunged lengthways into the dissepiment. The receptacle linear, surrounding the dissepiment, and immersed in the futures of the pericarpium. The orders are two, viz.

ORDER I. SILICULOSÆ, comprehending such plants whose pericarpium is a Silicula. This order contains fourteen genera, distinguished into 1. Those plants in which the Silicula is intire, not notched at the apex of which there are five, viz. *Draba*. *Lunaria*,
Subularia,

Subularia, Myagrum and Vella. 2. Those in which the Silicula is notched at the apex, of which there are nine, viz. Iberis, Alyssum, Clypeola, Peltaria, Cochlearia, Lepidium, Thlaspi, Biscutella and Anastatica.

ORDER II. SILIQUOSÆ, comprehending those plants whose pericarpium is a filiqua. This order contains eighteen genera, distinguished into 1. Those where the calyx is close at top, and the foliola approaching lengthways; of which there are ten, viz. Raphanus, Erysimum, Chamira, Cheiranthus, Hesperis, Arabis, Brassica, Turritis, Dentaria and Ricotia. 2. Those where the calyx is open, its foliola diverging at the top, of which there are eight, viz. Crambe, Isatis, Bunias, Cleome, Cardamine, Sinapis, Sisymbrium and Heliophila.

C H A P. XIX.

*Of the sixteenth Class MONADELPHIA *.*

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *one set of united* stamina. This class consists of nine orders. The characters of the flowers are as follow.

Character of the Class MONADELPHIA.

CALYX.—A perianthum always present, persisting, and in most genera double.

COROL.

* In this class the calyx is of great moment for distinguishing the genera, and fixes the limits with certainty. They were formerly distinguished by the fruit; which not being found sufficient, recourse was had to the leaves of the plant. The plants of this class are esteemed to be emollient and mucilaginous.

COROLLA.—Pentapetalous, the petals heart-shaped; the sides of which lap each one over the next, contrary to the motion of the sun.

STAMINA.—The filaments united below, but distinct upwards if there be more than one *. The exterior ones shorter than the interior. The antheræ incumbent.

PISTILLUM.—The receptacle of the fructification prominent in the center of the flower. The germen erect, surrounding the top of the receptacle in a jointed ring. The styles are all united below in one substance with the receptacle, but divided above into as many threads as there are germina. The stigmata spreading and thin.

PERICARPIUM.—A capsule divided into as many loculaments as there are pistilla. Its figure varies in the different genera.

SEEDS.—Kidney-shaped.

The Corolla in this class has been called Monopetalous; but as the petals are all distinct at the base, it is to be stiled more properly Pentapetalous, notwithstanding the petals cohere by the union of the stamina. The orders are nine, viz.

ORDER I. TRIANDRIA, comprehending such plants as have *three* stamina; of which there are two genera, viz. Aphteia and Galaxia.

ORDER II. PENTANDRIA, comprehending such plants as have *five* stamina. Of this order there are six genera, viz. Lerchea, Waltheria, Symphonia, Hermannia, Melochia and Erodium.

ORDER III. HEPTANDRIA, comprehending such plants as have *seven* stamina. Of this order there is but one genus, viz. Pelargonium.

ORDER IV. OCTANDRIA, comprehending such
L plants

* The Melochia has five antheræ, but it does not appear that there are any distinct filaments. See its character in the Genera Plantarum.

plants as have *eight* stamina ; of which there is likewise one genus, viz. Aitonia.

ORDER V. ENNEANDRIA, comprehending such plants as have *nine* stamina ; and of this too there is but one genus, viz. Dryandra.

ORDER VI. DECANDRIA, comprehending such plants as have *ten* stamina. Of this order there are three genera, viz. Connarus, Geranium, and Hugonia.

ORDER VII. ENDECANDRIA, comprehending such plants as have *eleven* stamina ; of which there is one genus, viz. Brownea.

ORDER VIII. DODECANDRIA, comprehending such plants as have *twelve* stamina. Of this order there is one genus, viz. Pentapetes.

ORDER IX. POLYANDRIA, comprehending such plants as have *many* stamina. Of this order there are twenty-one genera, viz. Gustavia, Gordonia, Morisonia, Mesua, Stewartia, Sida, Bombax, Adansonia, Butonica, Caroleia, Gossypium, Lavatera, Malacra, Malva, Malope, Urena, Alcea, Hibiscus, Achania, Althæa and Camellia.

C H A P. XX.

Of the seventeenth Class DIADELPHIA.*

THIS class consists of such plants as bear hermaphrodite flowers, furnished with *two* sets of *united* stamina†. The characters of the fructification are as follow:

Characters of the Class DIADELPHIA.

CALYX. A perianthium monophyllous, campanulate, and withering. The base gibbous, the lower part thereof fastened to the peduncle, the upper obtuse and melliferous. The brim quinque-dentate, acute, erect, oblique, unequal. The lowest odd denticle longer than the rest; the upper pair shorter and farther

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* The plants of the class Diadelphia are the papilionaceous, butterfly-shaped plants, of Tournefort; irregular tetrapetalous, of Rivinus; and leguminous of Ray, Hist. Plant. 883. Of all the classes this is the most natural, and has its flowers of the most singular structure. The calyx, though hitherto little attended to, is of great moment for fixing the genera. The legumen was held of consequence by other Systematists, but by Linnæus it is made of less account. The leaves of these plants are food for cattle, and the seeds also for quadrupeds of the same kind; the latter are accounted stultent.

† This circumstance implied in the title does not hold through the class, the plants given under the first distinction of the third order having monadelphious stamina; the class is therefore not so properly to be fixed from its title, as by the papilionaceous corolla, and other characters of the fructification. It may be observed likewise, that in the diadelphious flowers of this class, one of the two stamina is not a set of united filaments as in the other, but only a single stamen detached from the united set. See the characters of the fructification.

ther asunder. The bottom of the cavity moist with a melleous liquor, including the receptacle.

COROLLA. Termed papilionaceus, unequal; the petals expressed by distinct names, viz.

VEXILLUM, the *standard*, a petal covering the rest, incumbent, greater, plano-horizontal, inserted by its claw in the upper margin of the receptacle, approaching to a circular figure when it leaves the calyx, and nearly entire; along it, and especially towards its extremity, runs a line, or ridge, that rises up, as if the lower part of the petal had been compressed; the part of the petal next to the base approaching to a semicylindric figure, embraces the parts that lie under it. The disk of the petal is depressed on each side, but the sides of it nearest the margin are reflexed upwards. Where the halved tube ends, and the halved limb begins to unfold itself, are two concave impressions prominent underneath, and compressing the wings that lie under them.

ALÆ, the *wings*, two equal petals, one at each side of the flower; placed under the vexillum; incumbent, with their margins parallel, roundish or oblong, broader upwards, the upper margin straighter, the lower spreading more into a roundness; the base of each wing bifid, the lower division stretching out into a claw, inserted in the side of the receptacle; and about the length of the calyx; the upper shorter and inflexed.

CARINA, the *keel*, the lowest petal, often bipartite, placed under the vexillum and between the alæ, boat-shaped, concave, compressed on the sides, set like a vessel afloat, mutilate at the base, the lower part of which runs into a claw of the length of the calyx and inserted in the receptacle, but the upper and side laciniae are interwoven with that part of the alæ that is of the same shape. The form of the sides of the carina, is much like that of the alæ; and so also is their situation, except that they are lower, and stand within them. The line that forms the carina or keel

in this petal runs straight as far as the middle, and then rises gradually in the segment of a circle ; but the marginal line runs straight to the extremity, where meeting the carina, they terminate obtusely.

STAMINA. Called *Diadelphia*. The filaments two, of different forms, viz. a lower one that involves the pistillum, and an upper one incumbent on it. The former of these, from the middle downwards, is cylindraceous, membranaceous, and split lengthways on its upper side ; but the upper half terminates in nine subulate (awl-shaped) parts that are of the same length with, and follow the flexure of the carina of the corolla, and of which the intermediate or lower radii * are longer by alternate pairs. The upper filament is subulato-setose (like a bristle), covering the splitting of the former cylindraceous filament, incumbent on it, answering to it in situation, simple and gradually shorter ; its base is detached from the rest, and prepares an outlet for the honey on each side. The antheræ reckoned altogether are ten, one on the upper filament, and nine on the lower ; each of the radii being furnished with a single one ; they are small, all of one size, and terminate the radii.

PISTILLUM—Single, growing out of the receptacle within the calyx. The germen oblong, roundish, lightly compressed, straight, of the length of the cylinder of the lower filament which involves it. The style subulate, filiform, ascending, having the same length and position as the radii of the filament among which it is placed, and withering. The stigma downy, of the length of the style from the part turned upwards, and placed immediately under the antheræ.

PERICARPIUM—A Legumen, oblong, compressed, obtuse, bivalved, with a longitudinal future both above and below ; each future straight, though the upper one falls near the base, and the lower one rises near the top. The legumen opens at the upper future.

SEEDS

* Rays, meaning the divisions of the filaments.

SEEDS—A few, roundish, smooth, fleshy, pendulous, marked with an embrio that is a little prominent towards the point of insertion. When the ova* are hatched, the cotyledons† preserve the form of the halved seed.

RECEPTACLE—The proper receptacles of the seeds are very small, very short, thinner towards the base, obtuse at the disk that fastens them, oblong, inserted longitudinally in the upper suture of the legumen only, but placed alternate; so that when the valvulae have been parted, the seeds adhere alternately to each of the valves.

The ordinary situation of the flowers is obliquely pendulous, that is, at an acute angle from the perpendicular. The orders are four, viz.

ORDER I. PENTANDRIA, comprehending such plants as have *five* stamina; of which there is one genus, viz. Monniera.

ORDER II. HEXANDRIA, comprehending such plants as have *six* stamina; of which order there are two genera, viz. Fumaria and Saraca.

ORDER III. OCTANDRIA, comprehending such plants as have *eight* stamina. This order contains three genera, viz. Polygala, Securidaca, and Dalbergia.

ORDER IV. DECANDRIA, comprehending such plants as have *ten* stamina. This order contains fifty-two genera, distinguished into, 1. Those with all the stamina united; of which there are seventeen, viz.

* Eggs, meaning the seeds themselves, which answer to the eggs of animals, and are as it were hatched when the corculum or first principle of the new plant begins to strike root and vegetate. See Part I. Chap. 7.

† Side lobes of the seed. See Part I. Chap. 7. The two seed leaves, which first appear above ground, are these very cotyledons, which are brought up with the plant after the corculum has struck; and it is these seed leaves that are here spoken of.

viz. Nissolia, Peterocarpus, Amorpha, Erthyrina, Abrus, Spartium, Genista, Lupinus, Anthyllis, Pifcidia, Borbonia, Ulex, Arachis, Ebenus, Aspalathus, Ononis, and Crotalaria. 2. Those with the stigma downy, without the characters of the former section; of which there are seven, viz. Colutea, Phaseolus, Dolichos, Orobus, Pisum, Lathyrus, and Vicia. 3. Those with the legumen sub-bilocular, and without the marks of the former section; of which there are three, viz. Astragalus, Biserrula, and Phaca. 4. Those with the legumen containing in general but one seed, and without the characters of the former sections; of which there are three viz. Pforalea, Trisofolium, and Glycyrrhiza. 5. Those with the legumen articulated as it were; of which there are eight, viz. Æschynomene, Smithia, Hedyfarum, Coronilla, Ornithopus, Scorpiurus, Hippocrepis, and Medicago. 6. Those with the legumen unilocular and polyspermous, without the characters of the former sections; of which there are fourteen, viz. Trigonella, Glycine, Cylista, Clitoria, Robinia, Indigofera, Cicer, Ervum, Liparia, Cytifus, Mullera, Galega, Lotus, and Geofroya.

C H A P. XXI.

Of the eighteenth Class POLYADELPHIA.

THIS class consists of such plants as bear hermaphrodite flowers furnished with many sets of stamina; the flowers have no particular character farther than is expressed in the title. The orders are four viz.

ORDER I.

ORDER I. PENTANDRIA, comprehending such plants as have *five* stamina in each set. Of this order are two genera, viz. Theobroma and Abroma.

ORDER II. DODECANDRIA, comprehending such plants as have *twelve* stamina in each set. Of this order there is one genus, viz. Monsonia.

ORDER III. ICOSANDRIA, comprehending such plants as have *twenty* stamina in each set. Of this order there is but one genus, viz. Citrus.

ORDER IV. POLYANDRIA, comprehending such plants as have *many* stamina in each set. This order contains eight genera, viz. Melaleuca, Hopea, Durio, Glabraria, Munchausia, Symplocus, Hypericum and Acyrum.

CHAP. XXII.

Of the nineteenth Class SYNGENESIA.*

THIS class consists of such plants as have *compound* flowers. We have already paved the way for understanding this class, by the account given of compound flowers in Part I. Chap. 19. and the explanation of the titles of the class and its orders in Chap. 2. and 3. What is farther necessary here, is to give the character of the flowers. Compound flowers admit of a double description, viz. 1. Of the *whole* flower in its aggregate state, which is termed the *flosculose* flower: and, 2. Of the *flosculi*, florets, of which

* This class of compound flowers is a natural one, if we except the last order; which, upon the systematic principles assumed, could not be refused an admission into it. Its plants are commonly bitter and stomachic.

which it is composed. We shall begin with the first, which concerns only the calyx and receptacle, those being the only parts that are in common.

Characters of the FLOSCULOSE Flower.

CALYX.—The common calyx is a perianthium, which contains the florets and the receptacle. It is either *simple*, *augmented*, or *imbricated**. It contracts when the flowers are fallen, but expands and turns back when the seeds are ripe.

RECEPTACLE.—The common receptacle of the fructification receives many sessile florets on its disk, which is either *concave*, *plane*, *convex*, *pyramidal* or *globose*. The surface of the disk is either *naked*, without other inequality than that of being lightly dotted; *villose*, covered with upright hairs; or *palaceous*, covered with *paleæ* chaffs or straws, that are linear, subulate, compressed and erect, and serve to part the florets.

Characters of the FLORETS †.

CALYX.—A small perianthium, often quinquepartite, seated on the germen, persisting and becoming the crown of the seed.

COROLA.—Monopetalous, with a long and very narrow tube. It is seated on the germen, and is either
M *tubulate*,

* See these terms explained in Part I. Chap. II.

† The character here given is of an Hermaphrodite floret; but the flowers may also be either Male, Female, or Neuter, as the orders shew; It may not be improper therefore to observe in general upon these classic characters, which the author has drawn with such minute exactness, that they should be understood as collected only from the circumstances that most frequently occur in the class, and liable to variation, not in particular genera only, but even through the whole orders of the class in some cases.

tubulate, with the limb campanulate and quinquefid, and the laciniae spreading and turning back; *ligulate*, with the limb linear, plane, turned outwards, and the top whole; *tridentate*; or *quinquedentate*; or *wanting*, having no limb, and often no tube.

STAMINA.—The filaments five, capillary, very short, inserted in the neck of the corollula. The antheræ, five, linear, erect; and by the union of their sides forming a cylinder, that is tubulate, quinquedentate, and of the length of the limb.

PISTILLUM.—The germen oblong, placed under the receptacle of the flower; the style filiform, erect, of the length of the stamina, and perforating the cylinder of the antheræ. The stigma bipartite, the laciniae revolute and spreading asunder.

PERICARPIUM.—No true one, though in some there is a coriaceous (leathery) crust.

SEED.—A single one, oblong, often tetragonus, but commonly narrower at the base. It is either crowned, or with the crown wanting. The crown is of two kinds, either a pappus, or a perianthium: If a pappus, it is either sessile, or placed on a stipes; and consists of many radii, that are placed in a round, and are either simple, radiate or ramose: when the crown is a perianthium, it is such as is described above under that head.

The essence of a *Flosculose* flower consists in having the antheræ united in a cylinder, and a single seed below the receptacle of the floret *. The orders of this class are six, viz,

* That the essence of a *flosculose* or compound flower does not consist either in the common calyx or receptacle Linnaeus argues from hence; That the common calyx is wanting in *Echinops*, and the common receptacle in *Milleria*, though both these genera belong to this class; and that on the other hand the common calyx is found in *Scabiosa*, and the common receptacle in *Dipsacus*, both which plants belong to the class *Tetrandria*, though they have, with the *Gomphrena* and others, been falsely ranged with the compound flowers.

ORDER I. POLYGAMIA AQUALIS, comprehending such plants as have compound flowers, of which the florets are all hermaphrodite. This order contains forty-three genera, distinguished into 1. Such as have all the florets ligulate (the semisifcusoli of Tournefort); of which there are nineteen, viz. Scolymus, Cichorium, Catananche, Seriola, Hypochaeris, Geropogon, Andryala, Tragopogon, Picris, Leontodon, Scorzonera, Crepis, Chondrilla, Prenanthes, Lactuca, Hieracium, Sonchus, Laplana and Hyoseris. 2. Those with globular heads; of which there are eleven, viz. Atractylis, Barnadesia, Stokesia, Carlina, Oniscus, Arctium, Carthamus, Cynara, Carduus, Onopordon and Serratula. 3. Those with the florets tubulate; of which there are thirteen, viz. Ethulia, Ageratum, Cacalia, Chrysocoma, Eupatorium, Santolina, Calea, Athanasia, Spilanthus, Bidens, Staehelina, Pteronia and Tarchonanthus.

ORDER II. POLYGAMIA SUPERFLUA, comprehending such plants as have the florets of the disk hermaphrodite, and those of the radius female. This order contains thirty-nine genera, distinguished into 1. Tubulose; of which there are nine, viz. Artemisia, Carpesium, Tanacetum, Cotula, Baccharis, Conyza, Gnaphalium, Xeranthemum and Anacyclus. 2. Florets ligulate, sub bilabiate; of which there is one genus, viz. Perdicium. 3. Radiate; of which there are twenty-nine, viz. Bellis, Matricaria, Chrysanthemum Unxia, Doronicum, Arnica, Inula, Erigeron, Solidago, Cineraria, Senecio, Tussilago, Aster, Bellium, Tagetes, Helenium, Pectis, Boltonia, Leysera, Sigesbeckia, Eclipta, Anthemis, Achillea, Bupththalmum, Amellus, Tridax, Verbefina, Relhania and Zinnia.

ORDER III. POLYGAMIA FRUSTRANEA, comprehending such plants as have the florets of the disk hermaphrodite, and those of the radius neuter. This order contains nine genera viz. Selerocharpus, Gorteria,

ria, Didelta, Centaurea*, Zoegea, Rudbeckia, Coreopsis, Helianthus and Osinites.

ORDER IV. POLYGAMIA NECESSARIA, comprehending such plants as have the florets of the disk male and those of the radius female. This order contains fourteen genera, most of which are radiate, viz. Filago, Micropus, Milleria, Baltimora, Othonna, Hippia, Osteospermum, Calendula, Arctotis, Eriocephalus, Polymnia, Melampodium, Silphium and Chrysogonum.

ORDER V. POLYGAMIA SEGREGATA. This order comprehends such plants as have many partial cups contained in the common calyx, which separate and surround the flosculi. This order contains six genera, El ephantopus, Sphaeranthus, Echinops, Gundelia, Stoebe and Oedera.

ORDER VI. MONOGAMIA, comprehending such plants as have *simple* flowers. This order contains seven genera, viz. Strumpfia, Seriphium, Corymbium, Jasione, Lobelia, Viola and Impatiens.

C H A P. XXIII.

Of the twentieth Class GYNANDRIA †.

THIS class consists of such plants as have the stamina growing either upon the style itself, or upon a receptacle that stretches out into the form of

* The Corollae of the centaurea are all tubulose, but those of the radius differ from those of the disk, which brings it within the definition of a radiate flower; however, Linnæus in his description of the Centaurea, in the Genera Plantarum, has not called the Corolla radiate, but tubulosa diffinis, Tubulose of different forms.

† All the flowers of this class have a monstrous appearance, owing to the uncommon situation of the parts of the fructification.

of a style and supports both the *stamina* and *pistillum*. The orders are nine, viz.

ORDER I. DIANDRIA *, comprehending such plants as have *two* *stamina*. The flowers of this order have a most singular structure, answering to the following description.

Characters of the Order **DIANDRIA**, of the Class **GYNANDRIA**.

The germen is always contort, (like a screw). The petals are five; of which the two inner ones usually approach, and form a galea or helmet; the lower lip of which becomes a nectarium, and serves also for a pistillum and sixth petal. The style grows to the inner margin of the nectarium in such a manner, as to be with its stigma scarce either of them distinguishable. The Filaments are always two, supporting as many antheræ; which are narrower downwards; naked, or without tunic, and divisible, like the pulp of a Citrus. These last are covered by little cells, that are open underneath, and grow to the inner margin itself of the nectarium. The fruit is a capsule, that is unilocular, trivalved, and splits in the angles under the carinate, keel shaped ribs. The seeds are scobiform, (like saw-dust) numerous, affixed to a linear receptacle in each valve.

ORDER I. DIANDRIA, comprehending such plants as have *two* *stamina*. This order contains eleven genera, viz. *Orchis*, *Satyrium*, *Ophrys*, *Serapias*, *Limodorum*, *Cypripedium*, *Epidendrum*, *Arethusa*, *Gunnera*, *Disa* and *Forstera*.

ORDER II. TRIANDRIA, comprehending such plants as have *three* *stamina*. This order contains four genera, viz. *Sisyrinchium*, *Ferraria*, *Salacia* and *Stilago*.

ORDER.

* This order is a natural one, the genera differing only in respect to the nectarium. This part Linnaeus considers as a mark of distinction for these genera, far preferable to the root, tho' not received as such by former botanists.

ORDER III. TETRANDRIA, comprehending such plants as have *four* stamina. This order contains one genus, viz. *Nepenthes*.

ORDER IV. PENTANDRIA, comprehending such plants as have *five* stamina. This order contains three genera viz. *Gluta*, *Ayenia* and *Passiflora*.

ORDER V. HEXANDRIA, comprehending such plants as have *six* stamina. This order contains two genera, viz. *Aristolochia* and *Pistia*.

ORDER VI. OCTANDRIA, comprehending such plants as have *eight* stamina. This order contains only one genus, viz. *Scopolia*.

ORDER VII. DECANDRIA, comprehending such plants as have *ten* stamina. This order contains two genera, viz. *Kleinhovia* and *Helicteres*.

ORDER VIII. DODECANDRIA, comprehending such plants as have *twelve* Stamina. This order contains but one genus, viz. *Cytinus*.

ORDER IX. POLYANDRIA, comprehending such plants as have *many* Stamina. This order contains eight genera, viz. *Xylopia*, *Grewia*, *Pothos*, *Dracontium*, *Calla*, *Arum*, *Ambrosinia* and *Zostera*.

CHAP. XXIV.

Of the twenty first Class MONOECIA.

THIS Class consists of such plants as have no hermaphrodite flowers, but bear both male and female flowers on the same plant*. The orders of this class are eleven, viz.

ORDER I. MONANDRIA, comprehending such plants as have their male flowers furnished with one stamen. This order contains ten genera, viz. *Chara*,

* These are the Androgynous Plants. See Part I. chap. 21.

Zannichellia,

Zamichellia, Ceratocarpus, Artocarpus, Nipa, Elaterium, Cynanthera, Phyllanthus, Calla, and Aegopicon.

ORDER II. DIANDRIA, comprehending such plants as have their male flowers furnished with two stamina. Of this order there are two genera, viz. Lemna and Anguria.

ORDER III. TRIANDRIA, comprehending such plants as have their male flowers furnished with three stamina. This order contains twelve genera, viz. Omphalea, Typha, Sparganium, Zea, Coix, Tripsacum, Olyra, Carex, Axyris, Tragia, Hernandia, Phyllanthus and Comptomia.

ORDER IV. TETRANDRIA, comprehending such plants as have their male flowers furnished with four stamina. This order contains ten genera, viz. Urtica, Empleurum, Morus, Buxus, Betula, Centella, Serpicula, Aucuba, Littorella, and Cicca.

ORDER V. PENTANDRIA, comprehending such plants as have their male flowers furnished with five stamina. This order contains seven genera, viz. Nephelium, Xanthium, Ambrosia, Parthenium, Clibadium, Iva, and Amaranthus.

ORDER VI. HEXANDRIA, comprehending such plants as have their male flowers furnished with six stamina. Of this order there are two genera, viz. Zizania, and Pharus.

ORDER VII. HEPTANDRIA, comprehending such plants as have their male flowers furnished with seven stamina. Of this order there is but one genus, viz. Guettarda.

ORDER VIII. POLYANDRIA, comprehending such plants as have their male flowers furnished with more stamina than seven. This order contains thirteen genera, viz. Begonia, Ceratophyllum, Myriophyllum, Sagittaria, Theligonum, Poterium, Quercus, Juglans, Fagus, Carpinus, Corylus, Platanus, and Liquidambar.

ORDER

ORDER IX. MONADELPHIA, comprehending such plants as have their male flowers furnished with one set of united stamina. This order contains fifteen genera, viz. Hura, Pinus, Cupressus, Thuja, Acalypha, Dalechampia, Plukenetia, Cupania, Croton, Ricinus, Jatropha, Sterculia, Hippomane, Stillingia, and Gnetum.

ORDER X. SYNGENESIA, comprehending such plants as have their male flowers furnished with stamina of which the antheræ are united. This order contains six genera, viz. Trichosanthes, Momordica, Cucurbita, Cucumis, Bryonia, and Sicyos.

ORDER XI. GYNANDRIA, comprehending such plants as have their male flowers furnished with stamina that grow out of a kind of style, or imperfect pistillum, the perfect one being in the female flower: Of this order there are two genera, viz. Andrachne, and Agyneia,

C H A P. XXV.

Of the twenty-second Class DIOECIA,

THIS class consists of such plants as have no hermaphrodite flowers, but bear male and female flowers on distinct plants*. The orders of this class are thirteen, viz.

* There are many plants which have male and female flowers on distinct plants; but which are not admitted in this class, because this circumstance happens to one species only, and not to the whole genus. Instances of this are met with in Morus, Urtica, Laurus, Croton, Rumex, Silene, Carex, Rhus, Valeriana, Rhamnus, and Cucubalus. But it is observable, that in the plants that stand under the first distinction, in the order Monogynia of the class Pentandria, which are the Asperifoliæ (rough-leaved plants) of Ray, and also in the plants of the classes Didynamia, Tetradynamia, and Diadelphia, there have not been found any species where the sexes are on distinct plants: This may be accounted for from the structure of the flowers in those classes.

ORDER

ORDER I. MONANDRIA, comprehending such plants as have their male flowers furnished with *one* stamen. Of this order there are three genera, viz. *Najas*, *Pandanus*, and *Brodiaea*.

ORDER II. DIANDRIA, comprehending such plants as have their male flowers furnished with *two* stamina. This order contains ten genera, viz. *Vallisneria*, *Salix*, *Cecropia*, *Empetrum*, *Osyris*, *Stilago*, *Caturus*, *Excoecaria*, *Rellio*, and *Maba*.

ORDER III. TETRANDRIA, comprehending such plants as have their male flowers furnished with *four* stamina. This order contains seven genera, viz. *Hippophae*, *Trophis*, *Vilcum*, *Montinia*, *Brucea*, *Batis*, and *Myrica*.

ORDER IV. PENTANDRIA, comprehending such plants as have their male flowers furnished with *five* stamina. This order contains eleven genera, viz. *Pistacia*, *Lanthoxylum*, *Altronium*, *Iresine*, *Antidesma*, *Spinacia*, *Acnida*, *Cannabis*, *Humulus*, *Zanonia*, *Fewillea*, and *Ganarium*.

ORDER V. HEXANDRIA, comprehending such plants as have their male flowers furnished with *six* stamina. This order contains four genera, viz. *Tamus*, *Smilax*, *Rajania*, and *Dioscorea*.

ORDER VI. OCTANDRIA, comprehending such plants as have their male flowers furnished with *eight* stamina. This order contains three genera, viz. *Populus*, *Rhodiola*, and *Margaritaria*.

ORDER VII. ENNEANDRIA, comprehending such plants as have their male flowers furnished with *nine* stamina. This order contains two genera, viz. *Mercurialis*, and *Hydrocharis*.

ORDER VIII. DECANDRIA, comprehending such plants as have their male flowers furnished with *ten* stamina. This order contains four genera, viz. *Cariaca*, *Kiggelaria*, *Coriaria*, and *Schinus*.

ORDER IX. DODECANDRIA, comprehending such plants as have their male flowers furnished with *twelve* stamina.

stamina. Of this order there are three genera, viz. Euclea, Menispermum, and Datiscā.

ORDER X. POLYANDRIA, comprehending such plants as have their male flowers furnished with *many* stamina. Of this order there are three genera, viz. Clifortia, Flacourtia, and Hedycaria.

ORDER XI. MONADELPHIA, comprehending such plants as have their male flowers furnished with one set of united stamina. This order contains seven genera, viz. Juniperus, Taxus, Ephedra, Cissampelos, Napæa, Adelia, and Myristica.

ORDER XII. SYNGENESIA, comprehending such plants as have their male flowers furnished with stamina of which the antheræ are united. Of this order there is but one genus, viz. Ruscus.

ORDER XIII. GYNANDRIA, comprehending such plants as have their male flowers furnished with stamina that grow out of a kind of style, or imperfect pistillum, the perfect one being in the female flower. Of this order there is but one genus, viz. Cluytia.

C H A P. XXVI.

Of the twenty-third Class POLYGAMIA.

THIS Class consists of such plants as bear hermaphrodite flowers, and also either male or female flowers, or both. The Orders of this Class are three viz.

ORDER I. MONOECIA, comprehending such plants as have the Polygamy on the same plant. This order contains twenty-five genera, viz. Musa, Holcus, Cenchrus, Ischæum, Manisuris, Aegilops, Spinifex, Andropogon,

Andropogon, Anthistiria, Apluda, Valantia, Ophi-oxylon, Celtis, Veratrum, Fufanus, Acer, Gouania, Mimosa, Brabeium, Terminalia, Clusia, Hermas, Parietaria, Atriplex, and Ailanthus.

ORDER II. DIOECIA, comprehending such plants as have the Polygamy on two distinct plants. This order contains ten genera, viz. Panax, Diospyros, Crysitrix, Stilbe, Nyssa, Fraxinus, Anthospermum, Arctopus, Gleditsia*, and Pisonia.

ORDER III. TRIOECIA, comprehending such plants as have the Polygamy on three distinct plants. This order contains two genera, viz. Ficus†, and Cera-tonia.

N 2

C H A P.

* In Gleditsia, the hermaphrodites and males are on the same plant, and the females on a distinct one.

† To understand this order, the singular manner of the fructification of the Ficus must be explained. The fruit of the Ficus is not a pericarpium, but a receptacle, the interior sides of which support the flowers, which by this means are inclosed within it. These flowers in the cultivated fig-trees are female only; but there is a sort known by the name of Caprificus, that has male flowers; and another again called Erinofyce, which is androgynous, having both male and female flowers distinct, though lodged within the same receptacle. Here then we have the Trioecious polygamy explained; and if the descriptions of de la Hire may be trusted, there are figs that contain hermaphrodite flowers; which give us even a fourth habitation for the sexes. Thus much suffices to explain this order; but there is an objection naturally arising from hence to the doctrine of the sexes, the obviating which, will furnish the opportunity of a necessary remark. It will be asked, how it happens, that the fruit of our fig-trees ripen, if the plants are of one sex only, and have no assistance from the male? The answer is this; the fruit is in all cases to be distinguished from the seed contained within it: if the male be wanting, the seed will not vegetate when sown, but the fruit may nevertheless swell, and come to an appearance of perfection; and so it is observed to do in the instance in question, and in many others, especially where the fruit is formed of one of the parts less connected with seed; as calyx, receptacle, &c. tho' it is more common for it to drop off before it ripens, if not impregnated by the male.

C H A P. XXVII.

Of the twenty-fourth Class CRYPTOGRAMIA.*

THIS Class consists of such plants as conceal their fructification, having their flowers either within the fruit, or so small, as not to be perceptible to the naked eye. The fructification in these is also of an uncommon structure. The orders are four, viz.

ORDER I. FILICES, Ferns, comprehending such plants as are doriferoust. What is known of the fructification of these plants amounts only to the few characters following.

Characters of the FILICES.

CALYX—A squama growing out of the leaf, opening on one of its sides; and under which there are pedunculate globules; each globule is girt with an elastic ring, which breaks elastically, and sheds a dust which are the seeds. This order contains seventeen genera,

* The plants of this class are often of dangerous quality.

† Bearing their fruit on the back of the leaf. These have been called also Epiphyllouspermous, a Greek compound expressive of the same circumstance; Capillary, as being esteemed good for the hair; and Acaules, without stems; for in these plants, what rises out of the ground is plainly a leaf only: one of the characters of a stem or trunk is to be alike on every side; but, in the stalks of ferns, there is manifestly a front and back, the former being flat and channelled, and the latter convex which shews them to be leaves.

genera, distinguished into 1. Those plants whose fructifications grow in a spike, of which there are four, viz. *Equisetum*, *Onoclea*, *Ophioglossum*, and *Osmunda*. 2. Those whose fructifications are on a leaf and on the under side; of which there are ten genera, viz. *Acrostichum*, *Polypodium*, *Hemionitis*, *Asplenium*, *Blechnum*, *Lonchitis*, *Pteris*, *Adiantum*, *Trichomanes*, and *Dicksonia*. 3. Those whose fructifications are on the root; of which there are three, viz. *Marfilea*, *Pilularia*, and *Isoetes*.

ORDER II. MUSCI, Mosses. The characters of the plants comprehended under this title are, Antheræ without Filaments; the female flowers distinct, and without any pistillum; and the seeds, consisting only of a naked Corculum, without Cotyledon or Tunic. The genera of this order are eleven, and have been distinguished into 1. Those whose antheræ have no calyptra of which there are three, viz. *Lycopodium*, *Porella*, and *Sphagnum*. 2. Those whose antheræ have a calyptra placed on a distinct plant from the female floret, of which there are three viz. *Splachnum*, *Polytrichum* and *Mnium*. 3. Those furnished with a calyptra, male and female, placed on the same plant, of which there are five, viz. *Phascum*, *Bryum*, *Hypnum*, *Fontinalis*, and *Buxbaumia*.

ORDER III. ALGÆ, Flags. The plants comprehended under this order have their root, stem, and leaf all in one. The characters of the fructification of this order are not yet known, excepting the few descriptions given by *Michelius*. The genera are thirteen, divided into 1. Such as grow on land, of which there are eight genera, viz. *Marchantia*, *Jungermannia*, *Targionia*, *Anthoceros*, *Blasia*, *Lichen*, and *Byssus*. Those which grow in water; of which there are four, viz. *Tremella*, *Ulva*, *Fucus*, and *Conserva*.

ORDER IV. FUNGI, Mushrooms. The Genera of this order are given by *Linnaeus* after the method of *Dillenius*,

Dillenius*. The fructification being imperfectly known, no characters can be assigned for this order, farther than the title, which is familiar to every one. The genera are ten, distinguished into 1. Those furnished with a pileus, or cap, of which there are four, viz. Agaricus, Boletus, Hydnum, and Phallus. 2. Those that have no pileus, of which there are six, viz. Clathrus, Helvella, Peziza, Clavaria, Lycoperdon, and Mucor.

C H A P. XXVIII.

Of the APPENDIX.

BESIDES the twenty-four classes explained in the preceding chapters, Linnæus has, in his *Genera Plantarum*, given an appendix, which, in the *ordo generum* prefixed to that work, he calls the twenty-fifth class. It contains the *PALMÆ*, comprehending such plants as have a spadix and spatha. This order contains thirteen genera, distinguished according to the form of the leaf, such as fanshaped, pinnated, bipinnated, &c. The genera are Chamaerops, Borassus, Corypha, Thrinax, Cycas, Zamia, Phoenix, Elais, Areca, Elate, Cocos, Caryota, and Maurita.

C H A P.

* Linnæus tells us, he preferred the method of Dillenius for the fungi to that of Micheli: because it was plain to every one; whereas, that of Micheli, tho' that author has thrown great light upon this tribe, required too nice an inspection.

C H A P. XXIX.

Of GENERIC Distinctions.

HAVING now gone through the explanation of the classes and orders of the system, we come to the distinctions of the genera. These, by the theory of the sexual system, are to be regulated by the fructification only. The parts of fructification known to the earlier Botanists were few, and might be well thought insufficient for distinguishing the vegetable productions of nature: they therefore had recourse to the habit of plants, and other circumstances; and by this means a great number of genera, were established, which the new system is obliged to reject. Of these we shall give the reader an ample list of instances in chapter 31.

The fructification being admitted as the only foundation of the generic distinctions, all vegetables that agree in their parts of fructification are to be put together under one genus; and all such as differ in those parts are to be divided. The characteristic mark of each genus is to be fixed from the number, figure, proportion and situation of all the parts: but as there are few genera wherein all the parts are constant in every one of the species, we ought, wherever it is possible, to fix upon some one single circumstance that is constant, and make it the *essential* character. This in most genera may be had: thus the essence of Brunella, Torenia, Euphrasia, Alyssum, and Crambe, lies in the denticles of the stamina; that of Curcuma, Chelone, Bignonia, and Martynia in a mutilate stamen; the Ranunculus is distinguished by its nectarium, which is a pore in the claws of its petals; Hydrophyllum by the same part, which in that genus is a closed chink in the laciniae of the corolla;

rolla; and Helleborous and Nigella also, by their tubulose nectaria; in *Pancreatium* the stamina are inserted in the nectarium, which distinguishes it from *Narcissus*; in *Hyoscyamus* there is a covering to the capsules, by which it is known from *Physalis*; the *Refeda* has always a lateral nectarium, but varies in its corolla and pistillum; the *Campanula* has a quinquevalved nectarium, but is inconstant in the corolla and capsule; and lastly, the *Iris* has a stigma of singular construction, but varies in the beard of its corolla.

There is, however, no one part of fructification that can be relied on as a constant characteristic mark for all genera; it being found, that the part which is constant in some genera will be inconstant in others: Thus in *Carica* the flowers of the male plant are monopetalous, and those of the female pentapetalous; in *Myrica* some species have naked seeds, others berries; in *Fraxinus* some have a naked flower, and others a corolla; in *Geranium* some have regular corollæ, and others irregular; in *Linum* some are pentapetalous, others tetrapetalous; in *Aconitum* some are tricapsular, and others quinecapsular; and in *Trifolium* some are monopetalous, others polypetalous, some monospermous, and others polyspermous.

This inconstancy of particular parts in many genera has been another source of error amongst the earlier Botanists; who have parted many plants from their congeners on this account: of these mistakes we shall give an ample list in chapter 32.

When the characteristic mark of any genus is wanting in any particular species, we should proceed with caution, lest we confound genera that should be distinguished: for want of this caution, the *Erica* and *Andromeda* had been joined, but were parted afterwards on account of the two horns in the antheræ of the *Erica*; the *Adonis* had been joined to the *Ranunculus*, but was parted from it again, on observing that

that it wanted the nectariferous pore; and Aloe and Agave had been blended, till it was observed that in the latter the stamina were inserted in the corolla, and not in the receptacle.

When the characteristic mark of any genus is observed in some species of another genus near of kin to it, a like caution is again necessary on the other hand, lest we should multiply the genera by parting species that should stand together: Thus we find, that in Sedum, Sempervivum, Rhodiola Crassula, Tillæa, and Cotyledon, the nectaria adhere to the base of the pistillum; in Epilobium and Oenothera the calyx is tubulose; in Mespilus, Cratægus, and Sorbus, the structure of the flower is alike; and in both Alnus, and Betula, there are three florets on the foliole of the amentum*.

C H A P. XXX.

By what parts of fructification the GENUS may with the most certainty be determined.

THE more constant any part of the fructification is found, through the several species of any genus, the more it may be relied on with certainty as a characteristic mark for that genus: thus in Hypecoum the nectarium is constant, but not the filiqua; the Convallaria is constant in the spotted berry, but not in its corolla; the Lobelia in its corolla, but not in its fruit; the Cassia in its corolla, but not in its filiqua; and the Verbena in its calyx and corolla, but not in its stamina and seeds.

O

In

* The Alnus and Betula are joined by Linnæus under the title of Betula. The rest of these instances he has kept separate, notwithstanding the doubt raised here concerning the propriety of distinguishing them.

In some genera one part of the fructification is found to be the most constant, and in others another; but there is no part that is not liable sometimes to a variation: thus we find the Pericarpium variable in *Impatiens*, *Campanula*, *Primula*, *Papaver*, *Cistus*, *Fumaria*, and *Arbutus*; the calyx in *Nymphæa*, and *Cornus*; the corolla in *Vaccinium*, *Convallaria*, *Andromeda*, *Gentiana*, and *Linum*; and the seeds in *Ranunculus*, and *Alisma*.

If the *flowers* agree, but the *fruits* differ, the genus ought not to be parted: thus in those extensive genera, the *Cassia*, *Hedysarum*, *Sophora*, *Lavatera*, *Hibiscus*, and *Mimosa*, so great a number of species have been ranged under the same genus, on account of the conformity in the flowers, tho' there is a variation in the fruit.

That the figure of the flowers is more certain than that of the fruit appears from many examples; as from *Campanula*, *Primula*, *Antirrhinum*, *Alisma*, *Hibiscus*, *Cistus*, &c. but the proportion of the parts is subject to very great variation.

The *number* of the parts is more liable to variation than their *figure*, and is found sometimes to vary even upon the same plant; as in *Ruta*, *Chrysosplenium*, *Monotropa*, *Tetragonia*, *Euonymus*, *Philadelphus*, and *Adoxa*; in the flowers of all which the number of the parts varies from five to four: In these doubtful cases, the natural number must be collected from the primary flower; but in the variations of the number of the parts, there is a proportionable affinity worth remarking. In flowers, the *stamina* usually vary from ten to eight, and from five to four; the corolla and calyx from five to four, and the whole flower from four to three; and the fruit also usually varies from five to three, and from five to four.

The *situation* of the parts is the most constant, very rarely varying in the same genus.

The

The *regularity* of the petals is not so much to be depended on as some former Botanists* have thought; for we see in *Geranium* the European species have regular corollæ, but the African ones irregular.

The *nectarium* nature has made of the greatest consequence. This part, which had not even a name till Linnæus had distinguished it, is a decisive mark in all the following genera, viz. in *Orchis*, *Satyrium*, *Monotropa*, *Fumaria*, *Viola*, *Malpighia*, *Banisteria*, *Adenantha*, *Commelina*, *Laurus*, *Helxine*, *Dictamnus*, *Zygophyllum*, *Swertia*, *Lilium*, *Fritillaria*, *Hydrophyllum*, *Ranunculus*, *Hermannia*, *Berberis*, *Staphylea*, *Passiflora*, *Narcissus*, *Pancreatum*, *Mirabilis*, *Nerium*, *Stapelia*, *Asclepias*, *Diosma*, *Campanula*, *Plumbago*, *Hyacinthus*, *Rhododendron*, *Cheiranthus*, *Sinapis*, *Kiggelaria*, *Cluytia*, *Aquilegia*, *Nigella*, *Aconitum*, *Parnassia*, *Epimedium*, *Theobroma*, *Refesda*, *Grewia*, *Helleborus*, *Isopyrum*, *Tropæolum*, and *Impatiens*.

The *stamina* and *calyx*, being less subject to luxury, are far more certain than the petals.

The *corolla* varies as to its figure in many genera; as in *Vaccinium*, *Pyrola*, *Andromeda*, *Nicotiana*, *Menyanthes*, *Primula*, *Veronica*, *Gentiana*, *Hyacinthus*, *Scabiosa*, and *Narcissus*. It varies also as to number, being in *Ranunculus*, pentapetalous in some species, and polypetalous in others; in *Helleborus* also, pentapetalous and polypetalous; in *Statice*, pentapetalous and monopetalous; and in *Fumaria*, dipetalous and tetrapetalous: and the number is also sometimes variable in the same species; as is observed in *Carica*, and *Jatropha*.

The structure of the *Pericarpium* was formerly thought to be of great consequence in determining the genera; but there are examples without number that demonstrate the contrary. There are a great many genera that have been established on distinctions

O 2

in

*Rivinus, in particular.

in the pericarpium, and that are now rejected; of these we shall give an ample list in chap. 33.

The characters of *luxuriant* flowers, whether eunuchs* or mutilate, cannot be allowed any place in determining the genera; for in full flowers no number of petals can be assigned, and the stamina are generally wanting, the number of which makes a part of the generic character; and in mutilate flower, as in some species of *Campanula*, *Ipomoea*, and *Ruellia*, the corolla would be excluded from the description, contrary to the nature of the other species of the genus. But as the calyx† in full flowers is scarce ever altered, it may detect the genus; and the lowest series of petals in polypetalous corollæ remaining the same in respect to number, the genus may also be often known by that character; as in *Papaver*, *Nigella*, and *Rosa*.

CHAP.

*Eunuchs are such as have lost the stamina, which is the case of full flowers. Mutilate are those that are incomplete, wanting the corolla or perianthium.

† Some systematists have distributed the whole body of vegetables by the differences of the calyx; and in such systems the full flowers, as our author observes, are more easily referred to their proper genus than in his own, the calyx not being subject to luxuriance: instances of this are in *Hepatica*, *Ranunculus*, and *Alcea*.

C H A P. XXXI.

Of the GENERA, rejected by the sexual system, as not established on the fructification.

WE have observed in chap. 29. that the earlier Botanists had admitted many genera, on distinctions that were not grounded on the parts of fructification, but on the habit of plants, and on other circumstances which are now considered as specific distinctions only: of these we shall here give an ample list. The reader will here take notice, that under the first column are ranged the genera that are abolished; and over against them, in the second, the genus to which they are severally to be referred*, with the specific difference that had given occasion to the false distinction.

OLD GENERA.

NEW GENERA.

Limodorum	Orchis, with a fibrose root
Bistorta	Polygonum, with a fleshy root
Rapa	Brassica, with a gibbose root.
Sisfarum	Sium, with a tuberosc root.
Hermodyctylus	Iris, with a tuberosc root.
Sisyrynychium	{ Iris, with a double bulb, one over the other.

OLD

* The names and the generic arrangement of vegetables having undergone many alterations during the progress of the improvements made in the science, the new genera, to which these false ones are referred in this and the following lists, do not all stand under the titles given to them in the latter editions of the works of Linnæus: where this happens, we shall explain it by a note, choosing that method rather than to alter the lists themselves, which we have taken from the *Philosophia Botanica*.

OLD GENERA.

NEW GENERA.

Xiphium	Iris, with a tunicated bulb.
Lilio Fritillaria	Fritillaria, with a squamose bulb.
Mefomora	Cornus; with an herbaceous stem.
Anacampseros	Sedum, with an erect stem.
Psyllium	Plantago, with a branching stem.
Bellis Leucanthemum	} Bellis, with a leafy stem.
Pilosella	
Suber	Hieracium, with a naked stem.
Larix	Quercus, with a fungous bark.
Genistella	Abies*, with fasciculate leaves.
Potamopithys	Genista, with jointed leaves.
Lupinaster	Alfinastrum†, with leaves not starry.
Dracunculus	Trifolium, with digitate leaves.
Trichomanes	Arum, with pedate leaves.
Clymenum	Asplenium, with pinnate leaves.
Muscoides	Lathyrus, with pinnate leaves.
Lentiscus	{ Jungermannia, with leaves many times imbricate.
Faba	
Cytisogenista	Terebinthus‡, with no odd foliole to the leaves.
Colocasia	Vicia, with leaves that have no cirrhus.
Cirsium	Spartium, with leaves simple and triple.
Coronopus	Arum, with leaves not ear-shaped.
Coronopus	Carduus, with leaves without thorns.
Ilex	Cochlearia, with a pinnatifid leaf.
Scorzoneroïdes	Plantago, with dentate leaves.
Anguria	Quercus, with denticulate leaves.
Alcea	Scorzonera, with dentate leaves.
Millefolium	Cucurbita, with multifid leaves.
Cicutaria	Malva, with multifid leaves.
Cedrus	Parmica, with leaves minutely divided.
Ranunculoides	Ligusticum, with a cicuta leaf.
Alhagi	Juniperus, with a cypress leaf.
Nissolia	Ranunculus, with capillary leaves.
Marfilea	Hedysarum, with simple leaves.
	Lathyrus, with simple leaves.
	Jungermannia, with simple leaves.
	Balsamita

* Now Pinus. † Now Elatine. ‡ Now Pistacia.

|| Alcea is still the title of a genus, though of a different one, being applied to the Malva Rosea, or Holyhock.

OLD GENERA.

NEW GENERA.

Balsamita	Tanacetum, with undivided leaves.
Cepa	Allium, with fistulous leaves.
Aphaca	{ Lathyrus, with no leaves but stipulæ only
Mimosa	Acacia, with sensitive leaves.
Oxyoides	Oxalis, with sensitive winged leaves.
Aurantium	Citrus, with cordate petioles.
Calamintha	Melissa, with branching penduncles.
Cotinus	Rhus, with woolly penduncles.
Virga Sanguinea	Cornus, with a naked cyme.
Corona Imperialis	{ Fritillaria, with a head of leaves on the Racemus.
Stæchas	Lavandula, with bractæ on the spike.
Carex	Cyperoides , with androgynous spikes.
Chamæpithys	Teucrium, with sparsed leaves.
Acinos	Thymus, with sparsed leaves.
Limonium	Statice, with sparsed leaves.
Chamædrys	Teucrium, with verticillate leaves.
Thymbra	Satureia, with sparsed leaves.
Volubilis	Ipomoea, with flowers in heads.
Polium	Teucrium, with cymose flowers.
Castanea	Fagus, with flowers in spikes.
Fagopyrum	{ Polygonum, with spiked flowers, and a fibrose root.
Majorana	{ Origanum, with rounder spikes of flowers.
Malus	Pyrus, with a distinct face.
Cydonia	Pyrus, with a distinct face.
Armeniaca	Prunus, with a distinct face.
Cerasus	Prunus, with a distinct face.
Lauro-Cerasus	Prunus, with a distinct face.
Limon	Citrus, with a distinct face.
Napus	Brassica, with a distinct face.
Abinthium	Artemisia, with the outward face distinct.
Abrotanum	Artemisia, with the outward face distinct.
Bellidiastrum	Doronicum, with a distinct habit.
	Euphorbia

§ Mimosa is now the title of the whole genus, including the Acacias.

|| Carex is now the title of the genus.

C H A P. XXXII,

Of the GENERA rejected by the system, as grounded on the variations of some parts only of the fructification.

IT has been observed in chapter 29th that there are few genera, wherein all the parts of fructification are constant in every species; and that this inconsistency of particular parts had been another source of error in former Botanists: We shall here give a list of these mistakes, referring the old genera to the new titles, in the same manner as we did those in the list given in the preceding chapter.

OLD GENERA.

NEW GENERA.

Arisarum	Arum, with a hooded spathe.
Asteriscus	Bupthalmum, with a starry leafy calyx.
Silybum	Cardus, with a thorny calyx.
Moldavica	{ Dracocephalum, with the calyx gibbous and bilabiate.
Tithymaloides	{ Euphorbia, with the calyx gibbous and irregular,
Trionum	Hibiscus, with an inflated calyx.
Ficaria	{ Ranunculus, with a tryphyllous calyx and polypetalous.
Iva	Teucrium, with a gibbous calyx.
Lunularia	{ Marchantia, with the common calyx quadrifid.
Leucanthemum	{ Chrysanthemum, with the squamæ of the calyx narrow.
Cardiaca	Leonurus*, with a quinquedentate calyx.
Paronychia	{ Herniaria, with the leaves of the calyx hooded.

P

Pseudo-

* The scarlet Leonurus of the Cape is removed to the genus *Phlomis*, on account of its wanting the shining points on the antheræ; but the title *Leonurus* is nevertheless applied to the *Cardiaca*.

OLD GENERA.

NEW GENERA.

Pseudo-Dictamnus	{ Marrubium, with a funnel-shaped calyx
Anemone-Ranunculus	{ Anemonoides*, with a pentapetalous corolla.
Linaria	Antirrhinum, with a tail'd corolla.
Valerianoides	Valeriana, with a tail'd corolla.
Bromelia	Ananas†, with a tetrapetalous corolla.
Opuntia	Melocactus‡, with a polypetalous corolla.
Glaucium	Chelidonium, with a rosaceous corolla.
Polygonatum	{ Lil. Convallium§, with a tubulose corolla.
Centarium minus	Gentiana, with a funnel-shaped corolla.
Liliastrum	{ Hemerocallis, with a hexapetalous corolla.
Borbonia	Laurus, with a pentaphylloideous calyx.
Benjoe	Laurus, with an octofid corolla.
Auricula Urſi	{ Primula, with an hypocrateriform corolla.
Triphylloides	Trifolium, with a monopetalous corolla.
Oxycoccus	Vaccinium, with a tetrapetalous corolla.
Bonarota	Veronica, with a tubulose corolla.
Zannonia	Commelina, with a tripetalous corolla.
Borraginoides	{ Borrago, with an infundibuliform corolla.
Horminum	Salvia, with a galeate galea, and a concave beard.
Sclarea	Salvia, with a falcate galea, and a concave beard.
Phelypæa	{ Clandestina , with the galea of the corolla bifid.
Murucuja	Passiflora, with an undivided nectarium.
Sherardia¶	Verbena, with two stamina.
Stellaris	{ Ornithogalum, with stamina that are not flat.
Porrum	Allium, with trifid stamina.
Dodonæa	Ilex, with a trifid flower.

Hypocistis

* Now Anemone.

† Bromelia is now the title of the genus.

‡ Now Cactus. § Now Convallaria

|| Now Lathræa.

¶ The title Sherardia is still in use, but is applied to another Genus.

OLD GENERA.

NEW GENERA.

Hypocistis	Afarum, with a quadrifid flower.
Radiola	Linum, with a quadrifid flower.
Unifolium	Convallaria, with a quadrifid flower.
Bernhardia	Croton, with dioecious flowers.
Petasites	Tussilago, with fasciculate flowers.
Ananthocyclus	Coula, with flosculose flowers.
Ceratocephalus	Bidens, with radiate flowers.
Doria	Solidago, with few florets in the radius.
Medium	Companula, with fruit quinquelocular.
Speculum Veneris	Campanula, with siliquose fruit.
Cornucopioides	Valeriana, with an irregular flower.
Limontoides	Statice, with a monopetalous flower.
Viscaria	Silene, with a quinquelocular fruit.
Tetragonolobus	Lotus, with an angular fruit.

C H A P. XXXIII.

Of the GENERA, rejected by the system, as grounded on a difference in the fruit only.

IT has been observed in chap. 30, that a great many genera had been established on account of differences in the pericarpium, but that they have since been abolished: of these the following is a list; in which, as in the preceding lists, it will appear where they are now ranged.

OLD GENERA.

NEW GENERA.

Clandestina	Anblatum*, with an elastic fruit.
Trollius†	Helleborus, with a multicapsular fruit.
Sesamoides	Reseda, with a multicapsular fruit.
Lycopersicon	Solanum, with a multicapsular fruit.
	P 2 Ascyrum

* Now Lathraea.

† Trollius and Helleborus are parted again,

OLD GENERA WITH NEW GENERA

Alecyron*	Hypericum, with an quinquecapsular fruit.
Dortmanna	Rapuntium†, with a bilocular fruit.
Helianthemum	Cistus, with an unilocular fruit.
Androsæmum	Hypericum, with an unilocular fruit.
Pavia	Eculus, with an unilocular fruit.
Afarina	Antirrhinum, with multivalvular fruit.
Elatine	Antirrhinum, with the fruit bursting on the side.
Nelumbo	Nymphaea, with fruit perforate at the top.
Raphanistrum	Raphanus, with articulate fruit.
Cakile	Bunias, with articulate fruit.
Ulmaria	Filipendula, with twisted fruit.
Perfica	Amygdalus, with succulent fruit.
Cassia	Senna, with a succulent fruit.
Inga	Acacia , with a succulent fruit.
Malvaviscus	Hibiscus, with a succulent fruit.
Lobelia	Rapontium¶, with a drupaceous fruit.
Pereskia	Cactus, with a leafy fruit.
Sabina	Juniperus, with a warted fruit.
Bihai	Musa, with a trispermous fruit.
Alaternus	Rhamnus, with a trispermous fruit.
Frangula	Rhamnus, with a dispermous fruit.
Dracunculus	Hæmanthus, with monospermous fruit.
Onobrychis	Hedysarum, with monospermous fruit.
Malvinda	Abutilon**, with a fruit not inflate.
Cyllicapnos	Fumaria, with an inflate fruit.
Impatiens	Balsaminat††, with an attenuate fruit.
Guazuma	Cacost††, with a reticulate fruit.

Palionus

* The title Alecyron is still in use for another genus.

† Now Lobelia. ‡ Now Spirea.

§ Cassia is now the title of the genus, which includes the Cassia Fistula, and many other species; but the Cassia Lignea of Sumatra, whose bark so nearly resembles that of the Cinnamonomum, is a Laurus, as is the Cinnamonomum also; and the two plants are by some supposed to be the same.

|| Now Mimosa.

¶ Lobelia is now the title of the genus.

** Now Sida.

†† Impatiens is now the title of the genus.

†† Now Theobroma.

OLD GENERAL NEW GENERAL

Palurus	Rhamnus , with a shield shaped fruit.
Alisma	Damastron , with a fruit not cornicu- late.
Securidaca	Cornicella , with saulchion-shaped fruit.
Melo	Cucumis , with an ovate fruit.
Melopepo	Cucurbita , with a falcate fruit.
Rapistrum	Crabbe , with a fruit that does not open.
Radicula	Silymbrium , with a filiculose fruit.
Blattaria	Verbascum , with a rounder fruit.
Persea	Laurus , with a fruit that is berried on a very side.
Cururi	Seriana , with a fruit that bears seeds at the top.
Bursa pastoris	Thlaspi , with a fruit that has no mar- gin.
Nasturtium	Lepidium , with a margin to the fruit.
Valerianella	Valeriana , with a fruit not pappose.
Anemonoides	Anemone , with naked seeds.
Eupatoriophalacrum	Verbesina , with naked seeds.
Leontodontoides	Hyoseris , with seeds almost naked.
Attractylis	Carthamus , with an obsolete crown to the seeds.
Carthamoides	Carthamus with pappose seeds.
Zazintha	Lapsana , with pappose seeds.
Alypum	Globularia , with pappose seeds.
Xeranthemoides	Xeranthemum , with a feather'd pappus.
Asterocropterus	Aster , with a feather'd pappus.
Acarna	Chicus , with a feather'd pappus.
Achyrophorus	Hypochaeris , with a feather'd pappus.
Carlinoidea	Carlina , with an obsolete pappus.
Viticella	Clematis , with tail'd seeds.
Nymphoides	Menyanthes , with an arillus to the seed.
Karatas	Bromelia , with no arillus to the seed.
Tragopogonoides	Tragopogon , with bent seeds.

Tinus

* **Alisma** is now the title of the genus.

† **Securidaca** is still a title, but of a different genus.

‡ Now **Paullinia**.

§ **Attractylis** is still a title, but applied to another genus.

OLD GENERA.

Tinus
Opulus
Perficaria
Emerus
Foeniculum
Lens
Pepo
Falcaria
Cerinthoides
Blaria

NEW GENERA.

Viburnum, with pear-shaped seeds.
Viburnum, with heart-shaped seeds.
Polygonum, with triangular seeds.
Coronilla, with cylindrical seeds.
Anethum, with thick seeds.
Cicer, with lens-shaped seeds.
Cucurbita, with seeds not emarginate.
Sium, with slender seeds.
Cerinthe, with four distinct seeds.
Sherardia, with echinate seeds.

AN

INTRODUCTION
BOTANY, &c.

PART THE THIRD.

CHAP. I.

Of VEGETABLES and their parts.

VEGETABLES are divisible into the seven families or tribes following*, viz.

1. FUNGI, Mushrooms.
2. ALGÆ, Flags; whose root, leaf, and stem are all one.
3. MUSCI, Mosses; whose antheræ have no filaments, and are placed at a distance from the female flower, and whose seeds also want their proper tunic and cotyledons.
- 4-

* This natural division of vegetables into several tribes being given in the *Philosophia Botanica*, we were unwilling to omit it; but it is necessary to give the reader a caution, lest he confound it with the artificial or systematic distribution of plants explained in the second part of this work; the division here given is drawn from a consideration of the whole vegetable; whereas the systematic or artificial distribution into twenty-four classes is grounded on the fructification only.

4. *FILICES*, Ferns ; whose fructification is on the back of the *Fronde**.

5. *GRAMINA*, Grasses†; which have simple leaves, a jointed culm or stem, a glumose calyx, and a single seed.

6. *PALMÆ*, Palms ; which have simple stems that are frondose‡ at the summit, and have their fructifications on a spadix issuing from a *spatha*.

7. *PLANTS*, which include all that do not enter into any of the other divisions. These are

Herbaceous, when they die down to the root every year ; for in the perennial kinds, the buds are all produced on the root below the surface of the ground.

Shrubs, when their stems come up without buds§.

Trees, when their stems come up with buds.

Vegetables, are each primarily divisible into, 1. The root. 2. The herb or plant itself. 3. The fructification. Of these the last has been already treated of in the first book : The two others upon which the specific differences of vegetables more immediately depend, come now under consideration, and will be the subject matter of the ensuing chapters||.

CHAP.

* Leaves of the Ferns and Palms so called ; see the explanation of the term *Frons* in chap. 4.

† This tribe includes the various sorts of corn as well as the grasses.

‡ See the term *Frons*, explained in chap. 4.

§ Nature has put no limits between a tree and a shrub, which is only a vulgar distinction. This *Linnaeus* acknowledges ; and argues, that his own distinction, though he thinks it the best, is nevertheless exceptionable ; inasmuch as there are seldom any buds upon the large trees in India ; all which must therefore by this definition, notwithstanding their great height, be rank'd with shrubs.

|| It may not be improper here to obviate an objection that may be made to the method pursued in this work. It may be asked, If the matter of this third part would not have stood more properly in the first. In answer to this it is admitted, that the order of nature would thereby have been more directly followed ; but the design of this work was not so much to follow the order of nature, as to explain the system of *Linnaeus* ; and as the classes, orders and genera which come first in the system are grounded on the fructification, the beginning with that part of the vegetable was indispensably necessary.

CHAP. II.

Of Roots.

THE Root (whose office is to draw up nourishment, and which also produces the herb with its fructification) consists of two parts, viz. Caudex, the stock or body of the root, and Radicula, the Radicle or little root.

CAUDEX, the body of the root both ascends and descends.

The ascending caudex raises itself gradually above ground, serving often as a trunk, and produces the herb or plant.

The descending caudex strikes gradually downward into the ground, and puts forth radicles. It has been distinguished according to its various structure into

Perpendicular, when it runs directly downwards.

Horizontal, when it extends itself transversely under the earth.

Simple, when it has no subdivisions.

Ramose, branching; when it is divided into lateral branches.

Fusiform, spindle-shaped; when it is oblong, thick, and tapering, as in *Daucus* and *Pastinaca*.

Tuberose, knobbed; when it consists of roundish bodies collected into a fascicle or bunch; as in *Paeonia*, *Hemerocallis*, *Helianthus*, *Solanum* and *Filipendula*.

Repent, creeping; when it runs out to a distance, and puts forth radicles from space to space.

Fibrose.

Linnaeus infers from hence, that all trees and shrubs are to be considered as roots above ground, and that this is the reason that trees, when inverted, put forth leaves from the descending stem, and roots from the ascending.

Fibrose, when it consists only of fibrose radicles.

Præmorse, bitten off; when the lower part is truncate, and the termination not tapering; as in Scabiosa, Plantago and Valeriana.

RADICULA, the Radicle, is the fibrose part of the root, which terminates the descending caudex, and enables the root to draw nourishment for the support of the vegetable.

C H A P. III.

Of the HERB.

THE HERB is a part of the vegetable arising from the root, and terminated by the fructification. It comprehends,

1. The TRUNK, which serves to multiply the herb, and leads immediately from the root to the fructification. It is clothed with the leaves, and terminated by the fructification. See Chap. 4.

2. The LEAVES, whose office is to transpire and attract like the lungs in animals, and to afford shade. See Chap. 5. 6. 7.

3. The FULCRA, props; which serve as stays to strengthen the plant; but may however be taken off without destroying it. See Chap. 8.

4. The HYBERNACULA, Winterings*; each of which is a compendium of the herb upon its root before it begins to grow. See Chap. 9.

C H A P.

* These are the bulbs and buds.

CHAP. IV.

Of the TRUNK.

TRUNCUS, the trunk, is that which produces the leaves and fructification : It is of seven kinds viz. Caulis, Culmus, Scapus, Pedunculus, Petiolus, Frons and Stipes.

I CAULIS, a stem, is the proper trunk of the herb, and serves to elevate the leaves and fructification : It is either Simple or Compound.

Simple stems are such as proceed in a continued series towards their summits : and these may be, *integri*, entire ; or *ramose*, branchy.

Integri, entire ; when they are most simple, having scarce any branches. These may be.

Nudi, naked ; when they are destitute of leaves ; as in Euphorbia, Cactus, Stapelia, Ephedra and Cuscuta.

Foliate, leafy : when they are furnished with leaves.

Flexuose, bending different ways, when the direction of the stem changes at every joint ; as in Ptelea.

Volubiles, twining ; when they ascend spirally by the branch of some other plant : These wind either to the left, according to the motion of the sun (as it is commonly phrased) as in Humulus, Helxine, Lonicera and Tamus ; or to the right, contrary to the sun's motion ; as in Convolvulus, Basella, Phaseolus, Cynanche, Euphorbia and Eupatorium.

Reclinate, reclined ; when they bend in an arch toward the earth.

Procumbent, lying upon the ground ; when their direction is horizontal.

Repent, creeping ; when by lying upon the ground they put forth roots at certain intervals ; as in Hedera and Bignonia.

Q 2

Sarmentose ;

Sarmentose †; when they are repent and Subnude †.

Parasitic ‡; when they grow not out of the ground, but on some other plant.

Teretes, round; when they are cylindric.

Ancipites, double-edged; when they have two opposite angles; and also Digonous, Trigonous, Tetragonous, Pentagonous, Polygonous, having two, three, four, five, or many angles, which are all species of ancipites; also,

Triquetrous, three-square; when they have three plane sides; and,

Triangular, Quadrangular, Quinquangular, Multangular; when they have three, four, five, or many sides or angles.

Sulcate, furrow'd; when they are cut in with broad and deep grooves or channels.

Striate, streaked; when they are marked with very thin hollow lines.

Glabri, smooth; when they have a smooth surface.

Villose, hairy, or shaggy; when there is a down of soft hairs upon them.

Scabrous, rough; when they are covered with little projecting points.

Hispid ||; when they are covered with stiff bristles.

Ramose, branchy; when they are furnished with lateral branches: And these are,

Ascending; when the branches incline upwards.

Diffuse; when the branches are spreading.

Distich, in two rows; when the branches are produced in a horizontal situation.

Brachiate,

* From Sarmentum, a long shoot, such as those of a vine.

† Almost naked or bare of leaves.

‡ Supporting themselves on others like parasites.

|| The word expresses a greater degree of roughness.

Brachiate, having arms ; when the branches are opposite, and each pair is crossed by the pair next above or below it.

Ramosissimi, very branchy , when the branches are many, and without order.

Fulcrate, propt ; when the branches descend to the root ; as in *Ficus*.

Proliferous ; when they send forth branches only from the center of the apex ; as in *Pinus*.

The rest as in entire stems.

COMPOUND stems are such as are subdivided into *Ramuli*, small branches, and diminish as they ascend. These are either,

Dichotomous, forked ; when the division is always in two parts.

Subdivided ; when they are divided into branches irregularly or without order ; or,

Articulate, jointed ; when they are distinguished from space to space by knots or joints , as in *Piper*.

2. **CULMUS**, a straw, is the proper stem or trunk of a grass, and serves to elevate and support both the leaves and the fructification : It admits of most of the distinctions already given for a *caulis* or stem ; besides which it may be either,

Enodis, without knots ; when it is continuous, and not intercepted by joints.

Articulate, jointed ; when it is connected by various joints.

Squamose, scaly, when it is covered with imbricate scales.

3. **SCAPUS**, a Stalk, is an universal trunk, raising the fructification but not the leaves ; as in *Narcissus*, *Pyrola*, *Convallaria* and *Hyacinthus*.

4. A **PEDUNCLE**, or Footstalk of a flower, is a partial trunk, raising the fructification but not the leaves.

Pedicellus, is a partial peduncle.

The determination of peduncles respects place and manner.

Deter-

Determination in respect to place, shews where the base of the peduncle is inserted into the plant: and in this respect peduncles are,

Radical, belonging to the root; when they come out immediately from the root.

Cauline, belonging to the stem; when they are placed on the stem.

Rameous, belonging to the branches; when they come out upon the branches.

Axillary *, coming out from the wings; that is, either between the leaf and the stem, or between the branch and the stem.

Terminal, when they terminate the branches or stem.

Solitary, when there comes out but one from the same place.

Sparsed, scattered; when they are numerous, and come out without order.

Determination in respect to manner, shews how the flowers are borne and connected on the summits of the peduncles: And in this respect peduncles have the following variations.

Uniflorous, Biflorous, Triflorous, or Multiflorous peduncles, are such as bear one, two, three, or many flowers, according to the number of the fructifications on a single peduncle.

Fasciculus, a bunch, is a collection of flowers that are erect, parallel, forming a flat or even surface, and close to one another; as in *Dianthus barbatus* †. This is now introduced under the following term.

Capitulum, a little head, is composed of a number of flowers collected almost into a globular form; as in *Gomphrena*.

Spica, a Spike, has sessile flowers that are alternate and dispersed about a common peduncle that is simple.

* From Axilla, an arm-pit.

† Sweet William.

simple. It is called *Spica secunda*, a single-rowed spike, when the flowers are all turned one way: and *Spica disticha*, a double-rowed spike, when the flowers stand two ways.

A *Corymbus**, is a kind of spike, the flowers of which have each its proper pedicellus†, or partial footstalk, raised to a proportionable height; as in *Spiræa opulifolia* and *Ledum*.

A *Panicle*, is a fructification dispersed on peduncles variously subdivided. It is a diffuse panicle, when the pedicelli are divaricate, spreading asunder; and a coarctate or confined one, when they stand close to each other.

A *Thyrus*, is a panicle contracted into an ovate form; as in *Syringa* and *Petasites*.

A *Racemus*‡ consists of a peduncle that has short lateral branches; as in *Vitis* and *Ribes*.

Verricillus, a whorl, expresses a number of flowers that are subsessile||, and are produced in rings round the stems.

5. A *PETIOLE*, or footstalk of a leaf, is a species of trunk that fastens the leaves but not the fructification; which circumstance distinguishes it from a peduncle, which is the footstalk of a flower, as has been explained above. There are some cases where the fructification and leaves are born on the same footstalks; as in *Turnera* and *Hibiscus*; but these instances are very rare.

6. FRONS,

* *Corymbus*, in its ancient and proper signification, meant a bunch of ivy berries: but it is now used as a botanical term for all fructifications that are produced in the same manner.

† In the *Philosophia Botanica* it is not pedicellus, but petiolus; which seems to be a mistake, this term being applied to leaves only.

‡ *Racemus*, anciently signified a bunch of grapes.

|| With no footstalks, or with very short ones.

6. **FRONS***, is a species of trunk composed of a branch and leaf blended together ; and is frequently united with the fructification ; it belongs properly to the Palms and Filices.

7. **STIPES †**, is used to express the base or trunk of a Frons, and is applied only to the Palms, Filices and Fungi.

C H A P. V.

Of SIMPLE Leaves.

LEAVES are to be considered in three respects, viz. 1. as Simple. 2. Compound. 3. Determinate. We shall in this Chapter treat only of the simple.

SIMPLE leaves are such as have only a single leaf on a petiole. They differ in respect to Circumscription, Angles, Sinus, Apices, Margin, Superficies and Substance.

CIRCUMSCRIPTION considers the form of the circumference of leaves where there are no angles or sinuations : In which respect leaves are,

Orbiculate, round ; when the longitudinal and transverse diameters are equal, and the circumference circular.

Subrotund, roundish ; when the figure is nearly orbiculate.

Ovate, egg-shaped ; when the longitudinal diameter exceeds the transverse ; and the base is circumscribed

* There is no expression answerable to this term in our language. See the Note at page 43.

† The word in its proper signification means a trunk or Rock of any plant. But the sense in which the term is received in Botany is as here explained : It is used also to express the thread or fine trunk that supports the pappus in downy seeds. See Part I. Chap. 7.

scribed with the segment of a circle, but the apex is narrower.

Oval, or Elliptic; when the longitudinal diameter exceeds the transverse, and the circumscription of both upper and lower extremity is narrower than the segment of a circle.

Parabolic, in the form of a Parabola *; when the longitudinal diameter exceeds the transverse, and the figure contracting from the base upwards becomes Semiovate, half egg-shaped.

Spatulate, resembling a Spatula †; when the figure is roundish, but lengthened out by the addition of a linear base that is narrower.

Cuneiform, wedge-shaped; when the longitudinal diameter exceeds the transverse, and the figure gradually contracts downwards.

Oblong, when the longitudinal diameter is twice, thrice, &c. the length of the transverse, and the circumscription of each of the extremities is narrower than the segment of a circle.

ANGLES are the prominent parts of an horizontal leaf. In respect to these, a leaf is,

Lanceolate, spear-shaped; when the figure is oblong, narrowing gradually at each end towards the extremity,

Linear; when it is every where of the same breadth, though sometimes narrowing at the extremities only.

Acerose, chaffy; when it is linear and persisting; as in Pinus, Abies, Juniperus and Taxus.

Subulate, awl-shaped; when it is linear below, but gradually contracting towards the top.

Triangular, three-cornered; when the disk is surrounded by three prominent angles.

Quadrangular, Quinquangular, &c. four-cornered, five-cornered, &c. when four or five prominent angles lie round the disk.

R

Deltoid,

* A geometric Curve so called.

† A Surgeon's instrument so called.

Deltoid, shaped like a Delta †; when the figure is a Rhombus; that is, having four angles, of which the two lateral ones are less distant from the center than those at those extremities.

Rorund, round; when it has no angles.

SINUS, a hollow, is a term used to express those openings or cavities in leaves which distinguish them into parts: In respect to these, leaves are said to be,

Reniform, kidney-shaped; when they are roundish, and hollowed at the base, without any angles.

Cordiform, heart-shaped; when they are ovate, and hollowed at the base, and the hinder or lower part has no angles.

Lunulate, moon-shaped; when they are round, and hollowed at the base, and the lower part has no angles.

Sagittate, arrow-shaped; when they are triangular, hollowed at the base, and are furnished with angles at the lower part.

Hastate, javelin-shaped; when they are triangular, the base and sides hollowed, and the angles spreading.

Panduræform, pandure-shaped*; when they are oblong, broader above than below, and contracted in the sides.

Fissa, cloven; when they are divided by linear fissures, and have their margins straight; and from the number of such divisions they are called **Bifid**, **Trifid**, **Quadrifid**, **Multifid**, &c. cut into two, three, four, five, or many segments.

Lobate, lobed; when they are divided to the middle,

† A Greek letter so called. The figure of the Delta is a triangle, which does not exactly answer to the character here given of a deltoid leaf.

* A musical instrument of the lute kind, but now disused: The shape of it, as given by Mersennus Harm. Instr. b. 1. does not answer to that of the leaves here explained; the figure of which comes nearer to that of the body of the Violoncello or Violin.

dle into parts that stand wide from each other, and have their margins convex; and from the number of these they are called, *Bilobe*, *Trilobe*, *Quadrilobe* or *Quinquelobe*; consisting of two, three, four, or five lobes.

Palmate, handed; when they are cut longitudinally into many parts nearly equal; the divisions extending themselves downward, almost to the base where the segments cohere.

Pinnatifid, cut into wings; when they are divided, transversely into laciniae that are oblong and horizontal.

Lyrate, lyre-shaped; when they are divided transversely into laciniae, of which the upper ones are larger, and the lower ones farther asunder.

Laciniate, jagged; when they are variously divided into parts, and those parts in like manner indeminately subdivided.

Sinuate, hollowed; when they have broad and spreading openings in the sides.

Partite, divided; when they are separated down to the base; and from the number of the divisions they are *Bipartite*, *Tripartite*, *Quadripartite*, *Quinquelpartite*, or *Multipartite*; divided into two, three, four, five, or many parts.

Integra, entire; when they are without divisions, and have no sinus or opening. This stands opposed to all the kinds of divided leaves before described.

Apex, Tip, is the extremity in which the leaf terminates. Leaves, in respect to their apices, are called,

Truncate, lopped; when they end in a transverse line.

Præmorse, bitten in the fore part; when they are very obtuse, and are terminated by unequal notches or incisions.

Retuse, blunted; when they terminate in an obtuse sinus.

R. 2

Emarginate

Emarginate, nicked ; when they terminate in a notch.

Obtuse, blunt ; when they terminate as it were within a segment of a circle.

Acute, sharp ; when they terminate in an acute angle.

Acuminate, pointed ; when they terminate in a subulate apex.

Cirrhose, claspered ; when they terminate in a clasper or tendril ; as in *Gloriosa*, *Flagellaria* and *Nissolia*.

The MARGIN of a leaf is the outermost boundary of its sides, exclusive of its disk. Leaves, in respect to their margin, are,

Spinose, thorny or prickly ; when the margin of the leaf runs into points that are hard, stiff and pungent.

Inerm, unarmed or smooth ; which is opposed to spinose.

Dentate, toothed or indented ; when the margin ends in horizontal points, that are of the consistence of the leaf, and are separated by intermediate spaces.

Serrate, sawed ; when the margin is cut into sharp imbricate angles, that point towards the extremity of the leaf : If they point towards the base, the leaf is said to be *retrosum serrate*, sawed backwards.

Duplicato-serrate, doubly sawed ; when there is a twofold serrature, the less upon the greater.

Crenate, notched ; when the margin is cut into angles, that point toward neither of the extremities : And these are obtusely crenate, when the angles are rounded ; or acutely crenate, when the angles are pointed.

Duplicato-crenate, doubly notched ; when the notches are two-fold, the less upon the greater.

Repand, bending back again ; when the margin is terminated with angles and interjacent sinusses, that are both inscribed with the segments of circles*.

Car-

* A Serpentine edge.

Cartilagineous, gristly ; when the edge of the leaf is strengthened by a tough border, the substance of which differs from that of the leaf.

Ciliate, lashed or fringed ; when the margin is surrounded on all sides with parallel bristles.

Lacera, rent or ragged ; when they are variously cut on the margin into unlike segments.

Erofe, gnawed ; when the leaf is sinuate, and has other very small obtuse sinusses or hollows on its margin.

Integerrima, very entire ; when the outmost margin is entire and quite free from notches.

SUPERFICIES, Surface, is the outside, or what covers the disk of the leaf, and respects both the supine * disk or face of the leaf, and prone disk or back of it. Leaves, in respect to their surface, are,

Viscid, clammy ; when they are smeared over with a juice that is not fluid but tenaceous, sticky.

Tomentose, downy ; when they are covered with a nap of interwoven hairs, scarce perceptible, that gives them a whiteness.

Lanate, woolly ; when they are covered as it were with a spider's web ; as in *Salvia* and *Sideritis*.

Pilose, hairy ; when their surface is covered with distinct hairs that rise to some length.

Hirsute, rough with hairs ; when they are hairy in a greater degree.

Villose, shaggy ; when they are covered with a coarser hair or shag.

Hispid, rough ; when the disk is covered with a stiffish sort of bristles that are frangible.

Scabrous, rugged ; when the disk is covered with tubercules, little knobs.

Aculeate, prickly ; when the disk is beset with points that are sharp and stiff.

Striate,

* Supine is what lies on its back or face upwards ; and prone, the contrary : These terms are therefore well applied to the upper and under disk or face of a leaf.

Striate, streaked ; when the surface is cutting or scored longitudinally with parallel lines.

Pappillose, nippy ; when it is covered with vesicles, little bladders.

Punctate, dotted ; when it is besprinkled with hollow points or dots.

Nitid, bright ; when the smoothness of the leaves causes them to shine.

Plicate, plaited ; when the disk of the leaf rises and falls in angles towards the margin ; as in *Alchemilla*.

Undulate, waved ; when the disk of the leaf rises and falls in convexities towards the margin.

Crisp, curled, when the circumference of the leaf becomes larger than the disk admits of, and is hereby forced to undulate. All curled leaves are monsters.

Rugose, wrinkled ; when the veins of the leaves contract into a narrower compass than the disk, so that the substance between them is obliged to rise ; as in *Salvia*.

Concave, hollow ; when the margin of the leaf contracts, and becomes less than the circumscription of the disk, by which means the disk is depressed.

Venose, veiny ; when the vessels are branched all over the leaves, and their anastomose * or joinings are plain to the naked eye.

Nervose ; when they have simple unbranched vessels, that extend themselves from the base to the apex.

Colored ; when they change their green for some other color ; as in *Amaranthus tricolor* †.

Glabra, smooth ; when the surface is void of all inequality.

The SUBSTANCE of a leaf respects the conditions of its sides : In this respect leaves are,

Teretes

* A term in Anatomy, expressing the mouths or orifices of veins and arteries ; or in other words, the part where they unite, and the blood is discharged from the one into the other.

† Three-colored.

Teretes *, round like a pillar ; when they are for the most part cylindric.

Semicylindric, like a halved cylinder ; when they are round on one side, and flat on the other.

Tubulose, like a tube or pipe ; when upon cutting them they appear to be hollow within.

Carnose, fleshy or succulent ; when they are filled with a pulp.

Compressed, flattened ; when they are so compressed by their opposite marginal sides, that the substance of the leaf becomes greater than the disk.

Plane, level ; when they have both surfaces every where parallel.

Gibbous, bunched ; when by the plenty of pulp both the surfaces are rendered convex.

Convex, rounding ; when the disk rises higher than the sides.

Deprest, pressed down ; when the sides rise higher than the disk.

Canaliculate, channelled ; when a deep furrow runs along it, and sinks it almost to a half cylinder.

Ancipites, double-faced ; when the disk is convex, and there are two prominent longitudinal angles.

Ensiform, sword-shaped ; when they are ancipites, and grow narrower from the base to the apex.

Acinaciform, faulchion or scimitar-shaped ; when they are fleshy and compressed with one edge convex, and narrow, and the other straighter and broader.

Dolabriform, hatchet-shaped, when their figure is roundish, compressed and obtuse gibbous outwardly with a sharp edge, and taper round the lower part.

Linguiform, tongue-shaped ; when they are linear, fleshy, obtuse, convex underneath, and often with a cartilagineous margin.

Tri-

* Round one way and long the other : our language has no distinct term to express roundness in this sense ; the figure is by Mathematicians called a cylinder, from a Greek Word signifying to roll, a body of this figure being the best adapted to that sort of motion.

Triquetrous, three-cornered ; when they are subulate ; and have three flat longitudinal sides.

Sulcate, furrowed ; when they are scored longitudinally with numerous angles or ridges, and as many hollows or channels betwixt them.

Carinate, keeled ; when the prone part of the disk is prominent longitudinally.

Membranaceous ; when they have no perceptible pulp between the two surfaces.

CHAP. VI.

Of Compound Leaves.

A LEAF is said to be compound, when there are more than one upon a petiole or footstalk.

COMPOUND leaves are to be considered in respect to Structure and Degree.

By the STRUCTURE of a compound leaf is to be understood the insertion of the folioles or lesser leaves of which it is compounded ; and in this respect leaves are called,

Compound ; when a single petiole furnishes more than one leaf.

Articulate, jointed ; when one leaf grows out at the top of another.

Digitate, fingered ; when the apex of a single petiole connects many folioles : And they are termed Binate, Ternate, or Quinate, growing two, three, or five together, according to the number of folioles, of which the digitate leaf consists.

Pinnate, winged ; when the sides of a single petiole connect many folioles.

Pinnate with an odd one ; when it is terminated by an odd foliole.

A cirrhose pinnate leaf ; when it terminates in a cirrhous or clasper.

An abrupt pinnate leaf ; when it is terminated neither by a foliole nor cirrhous.

Oppositely pinnate ; when the folioles stand opposite to each other.

Alternately pinnate ; when the folioles are produced alternately.

Interruptedly pinnate ; when the folioles are alternately less.

Articulately pinnate ; when the petiole common to all the folioles is articulate, jointed.

Decursively pinnate ; when the folioles are decurrent, running down ; that is, extend themselves downwards along the petiole.

Conjugate ; when the pinnate leaf consists of two folioles only.

DEGREE, in a compound leaf, respects the subdivision of the common petiole. In respect to which leaves are,

Decomposed ; when a petiole once divided connects many folioles.

Bigeminate ; when a dichotomous petiole connects four folioles on its apices.

Biternate, or Duplicato-Ternate ; when there are three folioles on a petiole, and each foliole is ternate ; as in *Epimedium*.

Bipinnate, or Duplicato-Pinnate ; when the folioles of a pinnate leaf are pinnate.

Pedate, foot-shaped or branching ; when a bifid petiole connects many folioles on its inside only ; as in *Passiflora* and *Arum*.

Supra-decomposed ; when many folioles are born on a petiole, that has been any number of times subdivided.

Triternate, or Triplicato-Ternate ; when a petiole bears three folioles that are each of them ternate.

Tripinnate, or Triplicato-Pinnate ; when a petiole bears many folioles, each of which are bipinnate.

C H A P VII.

Of DETERMINATE Leaves.

BY the DETERMINATION of leaves is to be understood their character, expressed from some circumstance foreign to their own particular structure or configuration; as from their place, situation, insertion or direction.

By the PLACE of a leaf is meant the part where it is fastened to the plant. In respect to which, leaves are called,

Seminal, seed leaves; which before were the cotyledons, and are the first which appear.

Radical, root leaves; such as proceed from the root.

Cauline, stem leaves; such as grow on the stem.

Rameous, branch leaves; such as grow on branches.

Axillary *, such as are placed at the coming out of the branches.

Floral, flower leaves; such as are placed at the coming out of the flower.

By SITUATION is meant the disposition of the leaves on the stem of the plant. In respect to which leaves are called,

Stellate, starry; or verticillate, whorled; when the stalk is surrounded in whorles by more than two leaves: And these again receive the denomination of Tern, Quatern, Quine, Sene, &c. according to the number of leaves of which the star or whorl is composed; as in Nerium, Brabejum and Hippuris.

Opposite, when the cauline leaves come out in pairs facing each other, and each pair is crossed by the next, so that they point four different ways.

Alternate; when they come out singly, and follow in a gradual order.

Sparfed,

* From Axilla, an Armpit.

Sparfed, scattered ; when they come out in plenty about the plant without order.

Confert, crowded ; when they come out in quantities, fo as almost to cover the branches, and leave hardly any space between them.

Imbricate ; when they are confert and erect, fo as to lie over one another, each covering a part of the following one.

Fasciculate, bundled ; when many come out from the same point ; as in *Larix*.

Distich, in two rows ; when the leaves all respect two sides of the branches only ; as in *Abies* and *Dier-villa*.

In respect to their INSERTION (which is usually at the base) leaves are called,

Peltate, shield-fashioned ; when the petiole is inserted into the disk of the leaf, and not into the base or margin ; as in *Nymphæa*, *Hernandia* and *Colocasia*.

Petiolate ; when there is a petiole fastened to the leaf at the margin of the base.

Sessile, squat ; when the leaf has no petiole, but is fastened immediately to the stem.

Decurrent, running down ; when the base of a sessile leaf extends itself downwards along the stem beyond the proper base or termination of the leaf ; as in *Verbesina*, *Carduus* and *Sphæranthus*.

Amplexicaul, embracing the stalk ; when the base of the leaf embraces the sides of the stem crosswise on both sides ; or Semiamplexicaul, half embracing the stalk ; which only differs from Amplexicaul, in that it is in a less degree.

Perfoliate ; when the base of the leaf is continued across the stem till it meets again, so as to embrace it all round ; as in *Bupleurum*.

Connate, growing together ; when two opposite leaves join, and are united in one ; as in *Lonicera* and *Eupatorium*.

Vaginant, forming a Vagina or sheath ; when the

base of the leaf forms a cylindric tube that invests the branch.

In respect to their DIRECTION leaves are called,

Adverse; when their sides are not turned towards heaven, but towards the south; as in *Amomum*.

Oblique; when the base of the leaf looks towards heaven, and the apex or tip towards the horizon; as in *Protea* and *Fritillaria*.

Inflex, bending inwards; when the leaf is bowed upwards towards the stem.

Adprest; when the disk of the leaf lies close to the stem.

Erect, upright; when the angle they form with the stem is extremely small.

Patent, spreading; when they make an acute angle with the stem.

Horizontal; when they stand at right angles with the stem.

Reclined, or, as some term it, Reflex; when they are bowed downwards, so that the apex or tip is lower than the base.

Revolute, rolled back; when they are rolled downwards.

Dependent, hanging down; when they point directly to the ground.

Radicant, rooting; when the leaves strike root.

Natant, floating; when they lie on the surface of the water; as in *Nymphæa* and *Potamogeton*.

Demerse, sunk; when they are hid beneath the surface of the water.

CHAP. VIII.

Of the FULCRA of Plants.

FULCRUM, a prop, is a term used to express those small parts of plants, of which the chief use is to strengthen and support them.

Fulcra,

Fulcra are of seven kinds, viz. Stipula, Bractea, Spina, Aculeus, Cirrhus, Glandula and Pilus; all which we shall explain in their order.

STIPULA, is a scale or small leaf, stationed on each side of the base of the petioles or peduncles when they are first appearing; as in papilionaceous flowers; and also in Tamarindus, Cassia, Rosa, Melianthus, Liriodendron, Armeniaca, Persica, Padus, and others.

BRACTEA, a floral leaf, is so called when it differs in shape and color from the rest; as in Tilia, Fumaria bulbosa, Stoechas and Horminum.

SPINA, a thorn, is a kind of sharp weapon or armature, protruded from the wood of the plant; as in Prunus, Rhamnus, Hippophae, Celastrus and Lycium: it will often disappear by culture; as in Pyrus.

ACULEUS, a prickle, is the same sort of armature, proceeding from the cortex of the plant only; as in Rosa, Rubus, Ribes and Berberis.

CIRRHUS, a clasper or tendril, is a filiform spiral band, by which a plant fastens itself to any other body; as in Vitis, Bannisteria, Cardiospermum, Pisum and Bignonia.

GLANDULA, a little gland, is a kind of pap or teat, serving for the excretion of some humour: its situation is commonly on the petioles, the serratures of the leaves, or the tender stipulæ.

PILUS, a hair, is a sort of bristle, serving as an excretory duct to the plants.

C H A P. IX.

Of the HYBERNACULA of Plants.

THE HYBERNACULUM, winterlodge, is that part of a plant which incloses and protects the embryo or future shoot from external injuries. It is
of

of two kinds, viz. *Bulbus*, a bulb; and *Gemma*, a bud.

A **BULB**, is an hybernacle, placed on the descending caudex: It is of various kinds, viz, a squamose bulb, when it consists of imbricate lamellæ; (thin plates or scales) as in *Lilium*; a solid bulb, when it consists of a solid substance; as in *Tulipa*; a tunicate bulb, when it consists of many tunics or coats; as in *Cepa*: and an articulate or jointed bulb, when it consists of lamellæ that are linked together; as in *Lathræa*, *Martynia*, and *Adoxa*.

GEMMA, a bud, is an hybernacle placed on the ascending caudex: It consists either of stipulæ, of petioles, of the rudiments of leaves, or of cortical squamæ. (scales of the bark).

Buds are of various kinds. In the generality of plants, they are folifero-floriferous, producing both leaves and flowers; but in *Alnus* they bear leaves only; in *Populus*, *Fraxinus*, and some species of *Salix*, they bear leaves and flowers distinctly; in *Corylus* and *Carpinus*, leaves and female flowers; in *Pinus* and *Abies*, leaves and male flowers; and in *Daphne*, *Ulmus*, *Cornus* and *Amygdalus*, leaves and hermaphrodite flowers; In *Dentaria*, *Ornithogalum*, *Lilium* and *Saxifraga*, the buds are deciduous.

In several plants, there are no buds; as in *Philadelphus*, *Frangula*, *Alaternus*, *Paliurus*, *Jatropha*, *Hibiscus*, *Bahobab*, *Justicia*, *Cassia*, *Mimosa*, *Gleditfia*, *Erythrina*, *Anagyris*, *Medicago*, *Nerium*, *Viburnum*, *Rhus*, *Tamarix*, *Hedera*, *Erica*, *Malpighia*, *Lavatera*, *Solanum*, *Asclepias*, *Ruta*, *Geranium*, *Petiveria*, *Perefskia*, *Cupressus*, *Thuya* and *Sabina*.

In cold countries there are but few plants without buds; and in hot countries but few that have any.

C H A P. X.

Of the HABIT of Plants.

BY the HABIT, or external face of plants, is to be understood a certain conformity between vegetables that belong to the same genus, or are near of kin to each other*. This conformity may be in respect to various circumstances; as Placentation, Radication, Ramification, Intorsion, Gemmation, Foliation, Stipulation, Pubescence, Glandulation, Lactescence, Inflorescence, &c. As each of the terms here enumerated will furnish us with a separate Chapter, we shall forbear the explanation of them in this.

C H A P.

* This definition of the habit of plants, which we have taken from the *Philosophia Botanica*, seems to agree better with the old state of botany, when plants were actually ranged according to their external face, than with the modern system that ranges them by the fructification: For plants that by the system are neither of the same genus, nor have any systematic affinity, will often have a great conformity in their habit; whilst those of the same genus shall have their habits distinct. The habit of plants was the invention of the earlier botanists, who knew no better rule for the distribution of vegetables: And indeed Linnæus himself is induced to admit that it is often a good guide; and that Caspar Bauhin, and others, had in many cases discovered the affinity of plants by the habit, when systematists had failed in attempting the same by their artificial rules; nor does he think even the fructification, which is the invention of the moderns, sufficient for detecting all the classes of vegetables, though he considers it as the primary guide to the natural method so much sought after by those who have cultivated this science.

C H A P. XI.

Of PLACENTATION.

BY PLACENTATION * is meant the disposition of the Cotyledons at the time when the seed is beginning to grow. Plants in respect to Placentation, are termed,

1. ACOTYLEDONES, without cotyledons, when this part is wanting; as in Mosses.

2. MONOCOTYLEDONES, with a single cotyledon †; and these are either,
Perforate; as in Grasses.
Unilateral; as in Palms; or,
Reduced; as in Cepa.

3. DICOTYLEDONES, having two cotyledons; and these are either,

Immutate, unchanged; as in the class Didynamia; and in plants, whose pericarpium is a legumen, pommum, or drupa.

Plicate, folded; as in Gossypium.

Duplicate, doubled; as in Malva; and in the class Tetradynamia.

Obvolute, rolled up; as in Helxine.

Spiral, turned like a skrew; as in Salsola, Salicornia, Ceratocarpus, Basella, and all oleraceous plants †; or,

Reduced; as in umbellate plants.

4. POL-

* The Cotyledons of the seed in vegetables answer the purpose of the Placenta in the animal oeconomy; and hence the disposition of the Cotyledons is called Placentation.

† Linnæus observes, that the Monocotyledones are properly Acotyledones; the Cotyledons remaining within the seed.

‡ Pot herbs. The Oleraceous plants make an order in the Fragmenta Methodi Naturalis of Linnæus; consisting of Spinacia, Blitum, Beta, Galenia, Atriplex, Chenopodium, Rivina,

4. POLYCOTYLEDONES, with many Cotyledons; as in Pinus, Cupressus and Linum.

CHAP. XII.

Of RADICATION.

BY RADICATION is meant the disposition of the root of the plant; which is to be considered in respect to the ascending and descending caudex and the radicles; as has been shewn in Chap. 2. where the principal characters of roots have been explained. Roots are farther distinguished into,

BULBOSE; consisting of a bulb; and these are either,

Squamose, scaly; as in Liliū.

Tunicate, coated; as in Cepa.

Duplicate, double; as in Fritillaria: or,

Solid; as in Tulipa.

TUBEROSE, knobbed; and these are either,

Palmate, handed; as in Orchis.

Fasciculate, bundled; as in Pœonia; or,

Pendulous, hanging; as in Filipendula and Elæagnus.

ARTICULATE, jointed; as in Lathræa, Oxalis, Martynia and Dentaria.

FUSIFORM, spindle-shaped; as in Pastinaca, Daucus and Raphanus.

GLOBOSE, globe shaped; as in Bunium; and in some species of Ranunculus and Chærophyllum.

T

CHAP.

Rivinia, Petiveria, Herniaria, Illecebrum, Polycnemum, Axyris, Achyranthes, Amaranthus, Gomphrena, Celosia, Ceratocarpus, Corispermum, Callitriche, Salsola, Salicornia and Anabasis.

C H A P. XIII.

Of RAMIFICATION.

RAMIFICATION is the manner in which a tree produces its branches, with the situation of which that of the leaves is also connected *.

Some plants have no branches, though they have leaves which are placed on the stem. This is the case with *Dictamnus*, *Pæonia*, *Epimedium* and *Podophyllum*.

Leaves opposite or alternate are generally a mark of great difference in plants: a few genera however must be excepted, which have some species with opposite leaves, and others with alternate; as in *Euphorbia*, *Cistus*, *Lantana*, *Antirrhinum*, *Lilium*, and *Epilobium*.

In *Antirrhinum*, *Jasminum*, *Veronica*, and *Borrago*, the lower leaves at the branches are opposite, and the upper ones at the flowers alternate.

In *Potentilla supina*, and in *Potamogeton*, the lower leaves are alternate, and the upper ones on the branches opposite.

In *Nerium*, the lower leaves are opposite, and the upper ones tern.

In *Ruscus* the lower leaves are tern, and the upper ones alternate.

In

* The doctrines delivered here under the head of Ramification do not answer to the title, the greater part respecting rather the situation of the Leaves than that of the Branches: They might, with more propriety, have been collected under a head of Foliation; but as the term foliation is used to express the habit of plants, in respect to the position of leaves in the bud before they disclose themselves, as will be shewn in Chapter 16. these doctrines could not have stood under the same head, without a confusion in the use of the term; and this seems to be the reason why Linnaeus, whom we follow, has given them in this place.

In *Coreopsis alternifolia*, and in *Antirrhinum chalapense*, the lower leaves are quatern, and the upper ones alternate.

The natural situation of the leaves in plants that are much branched is best concluded from the radical leaves.

CHAP. XIV.

OF INTORSION.

INTORSION, winding, is the flexion or bending of any part of a plant towards one side.

CAULES volubiles, twining stems, wind either, Sinistrorsum, to the left; as in *Tamus*, *Dioscorea*, *Rajania*, *Menispermum*, *Cissampelos*, *Hippocratea*, *Lonicera*, *Humulus*, and *Helxine*; or,

Dextrorsum, to the right; as in *Phaseolus*, *Dolichos*, *Clitoria*, *Glycine*, *Securidaca*, *Convolvulus*, *Ipomœa*, *Cynanche*, *Periploca*, *Ceropegia*, *Euphorbia*, *Tragia*, *Basella*, *Eupatorium*, and *Tournefortia*.

CIRRHI volubiles, twining clasps, wind to the right and back again. Most leguminose plants have Cirrhi of this kind; in *Smilax*, and in most species of *Piper*, the petioles are cirrhiferous.

COROLLÆ bend to the left*, in *Asclepias*, *Nerium*, *Vinca*, *Rauwolfia*, *Periploca*, and *Stapelia*; and to the right in *Pedicularis*.

In *Trientalis* there is this singularity, that the petals are all imbricate, one side of each folding over the next towards the right.

In *Gentiana*, the imbrication of the petals before they are unfolded is contrary to the Sun.

T 2

PISTILLA

* Supposing yourself placed in the center, and looking towards the South.

PISTILLA, incline to the left in *Cucubalus* and *Silene*.

GERMINA are twisted to the left in *Helicteres* and *Ulmaria*.

FLOWERS, in respect to Intorsion, have,

A **Refupination***; which is, when the upper lip of the corolla looks towards the ground, and the under lip towards Heaven; as in the European *Viola*, *Ajuga orientalis*, *Ocimum*, and some species of *Satyrium*; or,

An **Obliquity**; as in the Species of *Hyssopus* called *Lopanthus*, *Nepeta sibirica*, and some species of *Pedicularis*.

SPICÆ, spikes, are,

Spiral; as in *Claytonia*, and in some *Asperifolioust* plants; or, **Incurvate**, crooked; as in *Saururus*, *Mimosa*, *Petiveria*, *Papaver*, *Sedum rubrum*, and *Lilium martagon*.

In several plants there is found a contorsion of the fibres, which answers the end of an *Hygrometer†*. Thus in *Avena*, there is an arista, or beard that is twisted like a rope; in some *Geraniums*, the arillus of the seed has a spiral tail; and in *Mnium*, the peduncles are twisted contrary ways above and below.

CHAP.

* **Refupination**, is when any thing is thrown on its back, or lies face upwards.

† The *Asperifoliæ* belong to the class *Pentandria*. See part 2. Chap. 8.

‡ An instrument for measuring the degree of dryness or moisture of the air. The fibres of the plants here instanced being affected by the quality of the air, the spiral part twists or untwists as the weather varies; and by observing this, the temperature of the air may be discovered.

C H A P. XV.

OF GEMMATION.

GEMMATION is the construction of the gem or bud, which is formed either of leaves, stipulæ, petioles, or squamæ. Those that are formed of leaves will be considered in the next chapter, under the head of Foliation; the rest are distinguishable into,

PETIOLAR buds, which are either,

Opposite; as in *Ligustrum*, *Phillyrea*, *Nyctanthes*, *Syringa*, *Hypericum*, *Coriaria*, *Buxus*, *Jasminum*, *Vaccinium*, *Arbutus*, *Andromeda*, *Ledum*, *Daphne*, *Laurus*, *Myrica*, *Linnæa*, *Diervilla*, *Lonicera*, *Eunymus*, *Fraxinus*, *Acer*, *Esculus*, *Bignonia*, *Opulus*, *Sambucus*, and *Psidium*; or

Alternate; as in *Salix*, *Spiræa*, *Genista*, *Solanum*, *Hippophae*, *Berberis*, *Ilex*, *Ribes*, *Juglans*, *Pistacia*, and *Plumbago*.

STIPULACEOUS buds; which are either,

Opposite; as in *Cephalanthus* and *Rhamnus catharticus*; or,

Alternate; as in *Populus*, *Tilia*, *Ulmus*, *Quercus*, *Fagus*, *Carpinus*, *Corylus*, *Betula*, *Alnus*, *Ficus*, and *Morus*.

STIPULACEO-PETIOLAR buds; which are

Alternate; as in *Sorbus*, *Cratægus*, *Prunus*, *Mespilus* germ. *Pyrus*, *Malus*, *Cotoneaster*, *Amygdalus*, *Cerasus*, *Padus*, *Melanthus*, *Rosa*, *Rubus*, *Vitis*, *Robinia*, *Cytisus*, *Potentilla*, *Fruticosa*, and *Staphylea*.

ANOMALOUS, or irregular buds; as in *Abies*, *Pinus*, and *Taxus*.

In many plants the buds are wanting, as has been shewn in Chap. 9.

C H A P. XVI.

Of FOLIATION.

BY FOLIATION is to be understood the complicate or folded state the leaves are in, whilst they remain concealed within the buds of the plant*. Leaves, in respect to the manner of their complication, are either,

INVOLUTE, rolled in ; when their lateral margins are rolled spirally inwards on both sides ; as in *Lonicera*, *Diervilla*, *Eúonymus*, *Rhamnus catharticus*, *Pyrus*, *Malus*, *Populus*, *Plumbago*, *Viola*, *Commelina annua*, *Plantago*, *Alisma*, *Potamogeton natans*, *Nymphæa*, *Saururus*, *Aster annuus*, *Humulus*, *Urtica*, *Hepatica*, *Sambucus*, *Ebulus*, and *Staphylea*.

REVOLUTE, rolled back ; when their lateral margins are rolled spirally backwards on both sides ; as in *Rosmarinus*, *Teucrium marum*, *Dracocephalon*, *Digitalis*, *Nerium*, *Andromeda*, *Ledum*, *Epilobium angustifolium*, *Rumex*, *Perficaria*, *Polygonum*, *Parietaria*, *Primula*, *Carduus*, *Cnicus*, *Tussilago*, *Senecio*, *Othonna*, *Potentilla fruticosa*, *Ptelea*, and some species of *Salix*.

OBVOLUTE, rolled against each other ; when their respective margins alternately embrace the strait margin of the opposite leaf ; as in *Dianthus*, *Lychnis*, *Saponaria*, *Epilobium oppositif.* *Dipsacus*, *Scabiosa*, *Valeriana*, *Marrubium*, *Phlomis*, *Salvia*, and *Prasium*.

CONVOLUTE, rolled together ; when the margin of one side surrounds the other margin of the same leaf, in the manner of a cawl or hood ; as in *Canna*, *Anomum*, *Calla*, *Arum*, *Piper*, *Hydrocharis*, *Commelina lutea*, *Prunus Armeniaca*, *Dodecatheon*, *Crepis*,

*Linnaeus claims the invention of the distinctions given in this chapter, preceding Botanists not having (as he says) attended to the foliation in buds.

pis, *Lactuca*, *Hieracium*, *Sonchus* fibir. *Tragopogon*, *Orobus*, *Vicia*, *Lathyrus*, *Solidago*, *Aster*, *Pinguicula*, *Vaccinium*, *Pyrola*, *Berberis*, *Brassica*, *Armoracia*, *Symphytum*, *Cynoglossum*, *Potamogeton* perfol. *Eryngium*, *Menyanthes*, *Saxifraga*, *Aralia*, *Dictamnus*, *Epiimedium*, and many grasses.

IMBRICATE; when they are parallel, with a strait surface, and lie one over the other; as in *Syringa*, *Ligustrum*, *Phillyrea*, *Nyctanthes*, *Linnæa*, *Cephalanthus*, *Coriaria*, *Hypericum*, *Valantia*, *Justicia*, *Portulaca*, *Laurus*, *Daphne*, *Hippophae*, *Ruscus*, *Cyanus* perennis, *Mespilus* germ. *Campanula*, *Polemonium* and *Sium*.

EQUITANT, riding; when the sides of the leaves lie parallel, and approach in such manner, as the outer embrace the inner; (which is not the case with the *ConduPLICATE* explained in the next head) as in *Hemerocallis*, *Iris*, *Acorus*, *Carex*, *Poa*, and some grasses.

CONDUPLICATE, doubled together; when the sides of the leaf are parallel, and approach each other; as in *Quercus*, *Fagus*, *Corylus*, *Carpinus*, *Tilia*, *Padus*, *Cerasus*, *Amygdalus*, *Cotoneaster*, *Frangula*, *Alaternus*, *Paliurus*, *Juglans*, *Pistacia*, *Rhus*, *Fraxinus*, *Sorbus*, *Rosa*, *Rubus*, *Potentilla* vulg. *Comarum*, *Bignonia*, *Cytisus*, *Robinia*, *Pisum*, *Melianthus*, *Pastinaca*, *Heracleum*, *Laserpitium*, *Poterium*, and most diadelphious Plants.

PLICATE, plaited; when their complication is in plaits lengthways, like the plicate leaves, explained in Chap. 5. as in *Cratægus*, *Berula*, *Alnus*, *Fagus*, *Vitis*, *Acer*, *Opulus*, *Viburnum*, *Ribes*, *Althæa*, *Malva*, *Humulus*, *Urtica*, *Passiflora*, and *Alchemilla*.

RECLINATE, reclined; when the leaves are reflexed downwards towards the petiole; as in *Podophyllum*, *Aconitum*, *Hepatica*, *Pulsatilla*, *Anemone*, and *Adoxa*.

CIRCINAL, compassed; (in rings) when the leaves are rolled in, spirally, downwards; as in *Filices*, and some *Palms*.

C H A P. XVII.

Of STIPULATION,

BY STIPULATION is meant the situation and structure of the Stipulæ at the base of the leaves.

The Stipulæ in different plants are found to be as various as the leaves. They are,

WANTING in the *Asperifoliæ* *, the class *Didynamia*, the *Stellatæ* †, *Siliquosæ* ‡, *Liliaceæ* §, *Orchidææ* ¶, and in most compound flowers.

PRESENT in the *Papilionaciæ* **, *Lomentaceæ* ††, and in the class *Icolandria*.

GEMINÆ, two together, or with a single one on each side in most plants.

SOLITARY, in *Melanthus*, on which the stipula is on the inside; and *Ruscus*, on which it is on the outside.

DE-

* *Pentandria Monogynia*.

† *Tetrandria Monogynia*.

‡ *Tetradynamia Siliquosæ*.

§ *Lilium*, *Fritillaria*, *Tulipa*, and *Erythronium*, are the liliaceous plants; which make an order in the *Methodi naturalis fragmenta*. See *Phil. Bot.* p. 28.

¶ *Orchis*, *Satyrion*, *Serapias*, *Herminium*, *Neottia*, *Ophrys*, *Cypripedium*, *Epidendrum*, *Limodorum* and *Arethusa*, are the *Orchidææ*; which are another order in the *Methodi naturalis frag.* See *Phil. Botanica*, p. 27.

** Class *Diadelphia*.

†† *Sophora*, *Cercis*, *Bauhinia*, *Parkinsonia*, *Cassia*, *Poinciana*, *Tamarindus*, *Goulandina*, *Adenanthera*, *Hæmatoxylon*, *Cæsalpinia* and *Mimosa*. These are an order in *M. N. frag.* See *Phil. Botan.* p. 34. They are called *Lomentaceæ*, from *Lomentum*, which signifies Bean Meal.

DECIDUOUS, in *Padus*, *Cerasus*, *Amygdalus*; and also * in *Populus*, *Tilia*, *Ulmus*, *Quercus*, *Fagus*, *Carpinus*, *Corylus*, *Betula*, *Alnus*, *Ficus* and *Morus*.

PERSISTING, in the class *Diadelphia*, and in *Icosandria Polygynia*.

ADNATE, growing close to the plant in *Rosa*, *Rubus*, *Potentilla*, *Comarum* and *Melanthus*.

SOLUTE, free or loose, in most plants.

INTRAFOLIACEOUS, on the inside of the leaves, in *Ficus* and *Morus*.

EXTRAFOLIACEOUS, on the outside of the leaves, in *Alnus*, *Betula*, *Tilia*, and the class *Diadelphia*.

C H A P. XVIII.

Of PUBESCENCE.

PUBESCENCE, downiness †, is an armature: by which plants are defended from external injuries. Pubescence is of the following kinds, viz.

SCABRITIES, roughness; which is composed of particles scarce visible to the naked eye †, that are scattered over the surface of the plant. This is distinguishable into,

I. Scabrities **GLANDULOSA**, a glandulose roughness when it consists of little glands, which are either,

U

Miliary,

* The genera here instanced are the same with those enumerated in the 15th Chapter, as having stipulaceous buds that are alternate, which are those referred to by Linnæus in this place.

† The term Downiness is not to be taken here in too strict a sense, as the following explanations shew.

‡ Guettardus was the first who carefully examined this kind of Pubescence.

Miliary, like grains of millet.

Vesicular, composed of bladders.

Lenticular, resembling Lentils.

Globular, globe-shaped ; as in *Atriplex* and *Che-
nopodium*.

Secretory serving for secretion.

Catenulate, consisting of little chains ; or,

Utricular, like little bottles.

2. Scabrities *SETACEA*, a bristly roughness ; when
it consists of bristles, which are either,

Cylindric, like a cylinder,

Conic, like a cone.

Hamose, hooked.

Glanduliferous, bearing glands.

Furcate, forked.

Securiform, hatchet-shaped ; as in *Humulus*.

Aggregate and starry ; as in *Alyssum* and *Helic-
teres* ; or,

Aggregate and simple ; as in *Hippophae*.

3. Scabrities *ARTICULATA*, a jointed roughness ;
when it is in joints, which are either,

Simplicis, simple.

Nodose, knotty.

Caudate, tailed.

Ramose, branching ; as in *Verbascum* ; or,

Plumose, feathery.

LANA, wool, is a protection to many plants against
the scorching heats as in *Sideritis canariensis*, *Sal-
via canariensis*, the *Salvia* called *Æthiopis*, *Mar-
rubium*, *Verbascum*, *Stachys*, the *Carduus* called
Eriocephalus * and *Onopordum*.

TOMENTUM, down, is a defence for plants against
winds ; it has commonly a whitish or hoary appear-
ance ; as in *Tomex*, *Medicago* and *Halimus*.

STRIGÆ

* There is a genus, intituled *Eriocephalus*, but the plant
here meant is the *Carduus Eriophorus* of *Lín. Species Plant. p.*
823, which is the *Carduus capite rotundo tomentosus* of *Casp.*
Bauhin : it was formerly called *Corona fratrum*.

STRIGÆ *, with their stiff bristles, are of use to prevent plants from being bruised or destroyed by vermin ; as in Cactus, Malpighia, Hibiscus and Rubus.

HAMI, hooks, fasten themselves to animals as they pass by ; these are either,

Triglochid, three-pointed ; as in Lappula ; or,

Incurvate, crooked ; as in Arctium, Marrubium, Xanthium and Petiveria.

STIMULI, stings, keep off naked animals by their venomous punctures ; as in Urtica, Jatropha, Acalypha, and Tragia.

ACULEI, prickles, keep off particular animals ; as in Volkameria, Pisonia, Cæsalpinia, Mimosa, Parkinsonia, Capparis, Erythrina, Robinia, Solanum, Cleome, Smilax, Convolvulus, Aralia, Duranta, Xylon, Drypis, Euphorbia, Tragacantha, and Tragopogon. In Hugonia the Aculei are spiral or cirrhose ; (from cirrhus, a clasper or tendril.)

FURCÆ, forks are a defence against animals in general, as in Berberis, Ribes, Gleditsia, Mesembryanthemum, Osteospermum, Ballota, Barleria, Fagonia and Poterium.

SPINÆ, thorns, serve to keep off cattle. These are either,

On the branches ; as in Pyrus, Prunus, Citrus, Hippophae, Gmelina, Rhamnus, Lycium, Catesbæa, Celastrus, Ulex, Asparagus, Spartium. Achronia, Ximenia, Ononis, Stachys, Alyssum, and Cichorium.

On the leaves ; as in Aloe, Agave, Yucca, Ilex, Hippomane, Theophrasta, Carlina, Cynara, Onopordum, Morina, Acanthus, Gundelia, Juniperus, Sal-

U 2

folia,

* Linnæus seems to have omitted the definition of this term. It signifies properly a row, or ordinate disposition of things of any sort ; and appears by the instances here given to be applied to thorns or prickles that come out in rows, or in some regular order. No English word occurs that is exactly expressive of the term in this sense.

sola, Polygala, Ruscus, Borbonia, Statice, Orieda and Clifortia.

On the calyx ; as in Carduus, Cnicus, Centaurea, Moluccella and Galeopsis ; or,

On the fruit ; as in Trapa, Tribulus, Murex, Spinachia, Agrimonia and Datura.

CHAP. XIX.

Of GLANDULATION.

GLANDULATION respects the secretory vessels ; which are either Glandules, Follicles, or Utricles.

Glandules are either,

Petiolar, when they are on the petioles ; as in Ricinus, Jatropha, Passiflora, Cassia and Mimosa.

Foliaceous, when they are produced from the leaves : and these are either from the serratures, as in Salix ; from the base, as in Amygdalus, Cucurbita, Elæocarpus, Impatiens, Padus, and Opulus ; from the back, as in Urena, Tamarix, and Croton ; or from the surface, as in Pinguicula and Drosera.

Stipular, when they are produced from the stipulæ ; as in Bauhinia and Armeniaca,

Capillary, like hairs ; as in Ribes, Antirrhinum quadrifolium, Scrophularia, Ceraustum, and Silene ; or,

Pores only ; as in Tamarix and Silene viscaria.

FOLLICLES *, are vessels distended with air ; as in Utricularia, at the root of which there are roundish vessels that are inflate, and have two horns ; and in Aldrovanda also, at the leaves of which there are pot-shaped follicles that are semicircular.

UTRI-

* The word signifies a little ball filled with wind.

UTRICLES, * are vessels filled with a secreted liquor. Thus in *Nepenthes*, the extremity of the leaves terminates in a thread, and this thread terminates in a cylinder, the top of which is closed with a lid that opens on the edge; in *Sarracena* also, the leaves are hooded almost like those of *Nepenthes*, but sessile at the roots; and in *Marcgravia*, from the center of the umbel there are vessels produced, which resemble the ringent corolla of the *Galeopsis*, but without the under lip.

CHAP. XX.

Of LACTESCENCE.

LACTESCENCE, milkiness, is when a copious juice flows out on any injury done to the plant. The colour of the liquor is either,

WHITE; as in *Euphorbia*, *Papaver*, *Asclepias*, *Apocynum*, *Cynanchum*, *Campanula*, *Lobelia*, *Jasione*, *Acer*, *Selinum*, *Rhus*, *Cactus mammillaris*, and the semiflorescense flowers of *Tournefort* †.

YELLOW; as in *Chelidonium*, *Bocconia*, *Sanguinaria*, and *Cambogia*; or,

RED; as in *Rumex sanguinea*.

CHAP.

† The word signifies a little bottle.

* *Sonchus*, *Lactuca*, &c. These make one of the classes of *Tournefort's* *Inst. R. H.*

C H A P. XXI.

Of INFLORESCENCE.

INFLORESCENCE, is the manner in which the flowers are fastened to the plant by the peduncle. Plants, in respect to inflorescence, are distinguished into,

VERTICILLATE, with the flowers in whorls ; as in Marrubium.

CORYMBIFEROUS, bearing the flowers in corymbi ; as in siliquose plants*.

SPICATE, with the flowers in spikes ; as in *Phytolacca*, *Arum*, *Phoenix*, *Piper*, &c.

PANICULATE, with the flowers in panicles ; as in fundry of the grasses.

AXILLARY flowers, are such as come out from the wings of the leaves or branches, which is the most common case.

OPPOSITIFOLIOUS, such as come out opposite to the leaves ; as in *Piper*, *Saururus*, *Phytolacca*, *Dulcamara*, *Vitis*, *Cissus*, *Corchorus*, *Geranium*, *Ranunculus aquatilis*, and the annual species of *Cistus*.

INTERFOLIACEOUS, such as come out between the opposite leaves, but are placed alternately ; as in *Asclepias*.

LATERIFOLIOUS, such as come out at the side of the base of the leaf ; as in *Claytonia*, *Solanum*, and the *Asperifoliæ*. (*Pentandria monogynia*).

PETIOLAR, when the peduncle is inserted in the petiole ; as in *Hibiscus*, and *Turnera*.

CIRRHIFEROUS, such as bear cirrhi ; as in *Cardiospermum*, and *Vitis*.

SUPRA-

* *Myagrum*, *Anastatica*, &c. The siliquose plants make an order in the *Met. nat. frag.* See *Phil. Bot.* p. 34. where the plants here meant are enumerated.

SUPRA-AXILLARY, such as come out above the wings ; as in the *Asperifoliæ*, and in *Potentilla monspeliensis*.

C H A P. XXII.

OF SPECIFIC DISTINCTIONS.

WE have treated of Generic differences in the five last chapters of the second part of this work ; we come now to treat of the Specific ones. For this a foundation has been laid in the preceding chapters of this third part, by the explanation of those parts of the vegetable on which the difference of the species most commonly depends ; but it is necessary to observe, that the fructification which we treated of in the first part, as preparatory to the distinctions of the classes and genera, has its influence likewise in many cases upon the species, as will appear in the course of this chapter.

Generic differences we have shewn to depend on the form of the fructification, and to be confined to that alone : specific differences take their rise from any circumstance, wherein plants of the same genus are found to disagree ; provided such circumstance is constant, and not liable to alteration by culture or other accidents. Hence Linnæus asserts, the species to be as many as there were different forms of vegetables produced at the creation ; and considers all casual differences as varieties of the same species.

Towards the end of the last century, the desire of encreasing the number of plants had so seized the Botanists of that time, that new species were established on too slight differences, to the great detriment of

of the science; and the same eagerness led them also to set down as new genera, what should have been species only. This evil was in some measure unavoidable, whilst there were no fixt principles for the regulation of the science in this respect. A remedy to it was first attempted by Vaillant; afterwards by Jussieu, Haller, Royenus, Gronovius, and others; and lastly by Linnæus, whose aphorisms have brought the work much nearer to perfection. Something indeed seems still wanting to complete these doctrines; but perhaps more is not to be expected till this branch of natural philosophy receives farther assistance from experiment.

We shall treat in this chapter of those circumstances by which species are distinguished with certainty, reserving the varieties for the chapter following.

The Root often affords a real specific difference*, and is sometimes the chief distinction; as in Scilla, where the species are scarce to be distinguished, but by the bulbs being tunicate, solid or squamose; and in Orchis, where the species are known by the roots being fibrose, round or testiculate; but as access cannot always be conveniently had to this part of the plant, it is better to fix the specific distinction on some other circumstance, if the case will admit of it.

The TRUNK often furnishes a sure mark of distinction. Thus in Hypericum†, Convallaria‡, and Hedyfarum§, there are many species distinguishable by the angles

* In Fumaria bulbosa, the greater and less sorts with a hollow root, and the greater and less sorts with a root not hollow, appear by the whole habit of the plants to be varieties only, as will be observed in the next chapter.

† Hypericum hirsutum (Lin. spec. plant 786.) caule tereti. Hypericum perforatum (Lin. spec. plant 785.) caule ancipiti. Hypericum quadrangulum (Lin. spec. plant 785.) caule quadrangulo.

‡ Convallaria polygonatum (Lin. spec. plant 315.) caule ancipiti.

Convallaria multiflora (Lin. spec. plant 315.) caule tereti.

§ Hedyfarum triquetrum (Lin. spec. plant 46.) caule triquetro.

angles of the stem; and in *Lupinus*, the species are not easy to be known, except by the same part being simple or compound. In *Eriocaulon*, the most remarkable difference is in the culmus, which is quinquangular, hexangular, decangular, &c. In *Pyrola*, some species are distinguished by a triquetrous scapus. In *Citrus*, the *Aurantium* is distinguished from its congeners by its petioles, which are winged or increased by a membrane on each side; and in *Gomphrena*, there is a species^{||} distinguished by its peduncles which are diphyllous, being furnished with two opposite folioles that are placed under the head of the flowers.

The LEAVES exhibit most natural and also most elegant specific differences. These have been so amply treated of already, that it would be only repetition to particularize or exemplify the numerous cases that occur of such distinctions.

FULCRA are generally a good mark of distinction, and must be carefully attended to by the Botanist for the determination of the species; as we shall shew by many examples, where the difference consists principally in those parts of the plant. Thus,

Aculei are remarkable in *Rubus*.

Spines in *Prunus*.

Braetæ in *Fumaria*, *Dracocephalon*, and the Indian species of *Hedysarum*; to which must added the *Coma*, which is a bushy head, composed of braetæ that are of a large size, and terminate the stem in *Corona imperialis*, *Lavandula*, and *Salvia*.

Glandules furnish the essential mark in *Padus*, *Urena*, *Mimosa*, *Cassia*, and many other genera, which it would be impossible to distinguish without being acquainted with this part. They are found on the serratures at the base of the leaves in *Heliocarpus*,

X

Salix,

^{||} *Gomphrena globosa* (Lin. spec. plant.)

Salix, and *Amygdalus*; on the back of the leaves in *Padus*, *Urena*, and *Passiflora*; and on the *Aculei* in *Bauhinia aculeata*, where by the apex of the *Aculei* a liquor is secreted. The *Amygdalus* is distinguished from *Perfica* only by the glandules of the serratures; nor could the species of *Urena* be ever fixed without examining the glandules of the leaves. The *Convulvulus* with a tuberculate calyx, is so variable in the shape of its leaves, that it seems divisible into many species, yet is kept together by the glandules; and there is a species of *Monarda*, distinguishable from its congeners by the glandules, that are sprinkled over the corolla.

Stipulæ are of great consequence in many extensive genera, where the species are liable to confusion. Thus in one species of *Melianthus* the *stipulæ* are solitary; in the other they are in pairs; and the *Cassia auriculata* is rendered distinct from all its congeners by the shape of its *Stipulæ*, which are reniform and barbate.

HYBERNACEÆ afford likewise a certain specific difference.

That Gems or buds often differ greatly in the same genus is proved by *Rhamnus*; in which the various species, viz. *Cervispina*, *Alaternus*, *Paliurus*, and *Frangula*, have all a difference in their buds; and in that extensive and intricate genus the *Salix*, the species are by the structure and foliation of the buds distinguished with great certainty.

Bulbs also distinguish the species, as is proved by *Scilla*, where they afford a real, and almost the only distinction; and by their situation in the axillæ of the leaves, they determine *Dentaria*, *Lilium*, *Ornithogalum*, *Saxifraga*, and *Bistorta*.

INFLORESCENCE affords the truest, and in most genera the most elegant distinction. Thus in *Spiræa*, the flowers are in some species duplicato racemose; in others corymbose; and in others again umbellate; without

without which characters there would be no certainty of the species.

The Peduncle or flower-stalk, which is the foundation of the characters of Inflorescence, varies as to the manner of its supporting the flowers; and is said to be,

Flaccid, wanting firmness; when it is so weak as to be bowed down by the weight of the flower itself.

Cernuus, nodding; when it is incurvate at the Apex, so that the flower inclines to one side, or towards the ground, and cannot preserve an erect posture, by reason of the strict curvature of the peduncle; as in *Carpesium*, *Bidens radiata*, *Cardus nutans*, *Scabiosa alpina*, *Helianthus annuus*, and *Cnicus sibiricus*.

Bearing fastigate flowers; when the pedicelli* or partial foot-stalks elevate the fructification into a fascicle, so that they are of an equal height at the top, as if they had been shorn off horizontally; as in *Dianthus* and *Silene*.

Patulus, spreading; when it is branched out every way, so that the flowers stand remote from each other. This stands opposed to coarctate, close.

Bearing conglomerate flowers: when it is branched and bears the flowers in close compact heaps, and is therefore opposed to a diffuse panicle.

Articulate, jointed; when it is furnished with a joint; as in *Oxalis*, *Sida*, and *Hibiscus*.

Coming out in pairs; as in *Capraria*, and *Oldenlandia biflora*.

Tern, or three from the same axilla; as in *Impatiens triflora*.

Flexuose, bending divers ways, or undulate, wavy; as in *Aira flexuosa*.

X 2

Remaining

* In this, and some other places, the *Philosophia Botanica* has Petiole for Pedicellus; but the latter is the proper term for the partial foot-stalk of a flower. See chap. 4.

Remaining on the plant after the fructification is fallen; as in *Jambolifera*, *Ochna*, and *Justicia*.

Incrassate, thickened towards the flower; as in *Cotula*, *Tragopogon*, and most cernuous flowers.

The parts of FRUCTIFICATION often furnish most certain and constant specific differences. Linnæus tells us he was once of a contrary opinion; and held, that as the flower was of short duration, and its parts commonly very minute, recourse should not be had to the fructification for specific differences, till all other ways had been tried and found ineffectual; but as the fructification contains more distinct parts than all the rest of the plant taken together, and certitude is found throughout nature to depend mostly on her minuter parts, he has since readily admitted this distinction.

In *Gentiana*, the species cannot any way be distinguished, if the flower is not admitted as a specific character; but they are easily distinguished by their corollæ, which vary in being campaniform, rotate, infundibuliform, quinquesid, quadrisid, octosid, &c.

In *Hypericum*, the species are distinguished by the flowers being trigynous (with three styles) or Pentagynous, (with five styles).

In *Geranium*, the African species are distinguishable from their European congeners, by the corolla being irregular, and also by the connection of their stamina.

In *Lichen*, the fructification is distinguishable into *Tuberculum*, a little knob, which is a fructification consisting of rough points collected like a heap of dust; *Scutellum*, a small buckler, which is a concave orbiculate fructification, the margin of which is elevated on every side; or *Pelta*, a little shield, which is a plane fructification fastened for the most part to the margin of the leaf*.

In

* The terms explained here, and in the following paragraphs respect such circumstances of the parts of fructification as concern rather the specific differences than the classic or generic ones;

In Mosses, the capitulum or little head is a capsule containing seeds, in the form of fine dust.

In Grasses, spicula, a little spike, is a partial one; the arista is tortile, twisted, when it has a twisted joint in the middle. Articulus, a joint, is the part of the culmus that lies between two geniculi, or knots.

A radiate compound flower consists of disk and radius. The radius is composed of irregular corollulæ in the circumference; and the disk of smaller corollulæ, that are for the most part regular.

A decompound flower contains within the same calyx lesser calyces, that are each of them common to many flowers; as in Sphæranthus.

The Corolla is said to be equal, when its parts are equal in figure, magnitude and proportion; unequal, when the parts answer in proportion, though not in magnitude, so that the flower comes out to be regular; regular, when it is equal in respect to the figure, magnitude, and proportion, of the parts; irregular, when the parts of the limb differ in figure, magnitude or proportion. Rictus, a gaping or grinning, is the gap or opening between the two lips of the corolla. Faux, the gorge or gullet, is the opening of the tube of the corolla. Palatum, the palate, is a gibbosity or bunching out in the faux of the corolla. Calcar, a spur, is a nectarium extending in a cone in the hinder part of the corolla. The Corolla, is urceolate, pitcher-shaped, when it is inflate and gibbous on all sides, after the manner of that vessel; cyathiform, shaped like a drinking-glass, when it is cylindric, but widening a little towards the upper part; conniving, when there is a convergency of the points of the several lobes of the limb; or, lacera, rent, when the limb is finely cut.

The

ones; and we have therefore followed Linnæus in subjoining them to this head, notwithstanding that some few of them have been already mentioned and explained in the first part of this work.

The Anthera, is versatile (easy to turn), and incumbent, (lying flat) when it is fastened on at its side; and erect, when it is fastened on at its base.

The Pericarpium is inflate, puffed, when it is hollow like a bladder, and not filled up with seeds; prismatic, prism-shaped, when it is a linear polyedron with plane sides; turbinate, top-shaped, when it tapers towards the base, as in *Pyrus*; contort, twisted, when it turns spirally, as in *Ulmāria*, *Helicteres*, and *Thalictrum*; acinaciform, faulchion-shaped, when the fruit is compressed like a blade, one of the longitudinal angles being obtuse, and the other acute; echinate, prickly like an *Echinus*, (hedge-hog) when it is beset on all sides with spines or aculei; torose*, brawny, when it is here and there gibbous with brawny swellings or prominences; as in *Lycopersicon* and *Phytolacca*.

C H A P. XXIII.

Of VARIETIES.

THE collecting of VARIETIES under their proper species, is a work no less necessary than that of collecting the several species under their proper genus. We have observed in the last chapter, that such differences as are only incidental to vegetables, and are not found constant and unchangeable in them, are to be considered as varieties only. These varieties are grounded chiefly on the following circumstances, viz. Sex, Magnitude, Time of flowering, Color,

* Torus signifies properly the rise or swelling out of the strong muscles of an arm.

for, Scent, Taste, Virtues and uses, Duration, Multitude, Pubescence, Leaves, and monstrous flowers. Of all which we shall treat in their order.

The SEX of plants in the class Dioecia affords a variety of all others the most natural; for the male and female flowers in this class being upon different plants, these last are distinguished by the fructification, though the species is the same in both. But it must be observed, that this kind of variety holds only in the class Dioecia; for in the genera that belong to any of the hermaphrodite classes, the same circumstance, whenever it happens, becomes a specific distinction: Thus in Rumex, which belongs to the class Hexandria, the Acetosa and Acetosella, being dioecious plants, that is, having their male and female flowers on distinct roots, these species are thereby distinguished from the rest of the genus.

MAGNITUDE is no specific difference, but a variety, being liable to alteration from the soil or climate.

The TIME of flowering is a treacherous mark of a distinct species; and unless supported by other distinctions, can only be considered as a variety.

COLOR is found so changeable in the same species, that it must be considered as a variety only.

In Flowers the color is most variable; as in Tulipa, Hepatica, Cyanus, Campanula, Aquilegia, Viola, Galega, Pumaria, and others, which it would be tedious to enumerate: the most usual change, is from blue or red to white. The trifling distinctions which have been made by Anthophili (florists) in some of the genera we have here instanced, from the colors of the corollæ, and to which they have given such pompous names*, are held by Linnæus to be below the notice

* Phœbus,	Triumphus Floræ,
Apollo,	Pompa Floræ,
Astræa,	Splendor Asiæ,
Dædalus,	Corona Europæ,
Eupido,	Gemma Hollandiæ.

notice of the true Botanist : and he warns him from catching the infection of such idle amusement.

Fruits are observed to change their color as they ripen ; the pericarpium, when it is a berry, changing from green to red, and from red to white ; and in ripe fruits, the color, whether white, red, or blue, admits of variation ; as in *Pyrus*, *Prunus*, *Cerasus*, and others*.

Seeds rarely vary in their color ; though there are instances of it in *Papaver*, *Avena*, *Phaseolus*, *Pisum*, and *Faba*†.

Roots are also little subject to alteration in color ; yet a variation is observed in the roots of *Daucus* and *Raphanus*‡.

Leaves are rarely found to quit their green, but they are colored in *Amaranthus*, and frequently become

* *Solanum Guineense* fructu nigerrimo (B.)
Solanum annuum baccis luteis (Dillen.)
Solanum judaicum baccis aurantiis (Dillen.)
Rubus vulgaris major fructu albo (Raj.)
Ribes vulgare acidum albas baccas ferens (J. B.)

† *Papaver hortense* nigro semine (C. B.)
Papaver hortense semine albo (C. B.)
Avena vulgaris & alba (C. B.)
Avena nigra (C. B.)
Phaseolus vulgaris fructu violacea (Tournef.)
Phaseolus vulgaris fructu ex rubro et nigro variegato (Tourn.)
Phaseolus fructu albo venis nigris et luteis distincto (Tourn.)
Pisum maximum fructu nigra linea maculato (H. R. P.)
Pisum hortense flore fructuque variegato (C. B.)
Faba ex rubicundo colore purpurascens.

‡ *Daucus sativus* radice alba (Tourn.)
Daucus sativus radice lutea (Tourn.)
Daucus sativus radice aurantii coloris (Tourn.)
Daucus sativus radice atro-rubente (Tourn.)
Raphanus niger (C. B.)

come spotted; as in *Perficaria*, *Ranunculus*, *Orchis*, *Hieracium*, and *Lactuca**.

The whole plant is often found to vary in its color; as in *Eryngium*, *Abrotanum*, *Artemisia*, *Atriplex*, *Amaranthus*, *Portulaca*, and *Lactuca*†.

SCENT in plants is, of all other circumstances, the least to be depended on; and therefore all species grounded on a distinction in the scent only are to be rejected, and referred to varieties.

TASTE in plants is a circumstance variable from soil or culture; and not to be depended upon as a real difference. The distinctions of gardeners in fruit of the same species, is considered by Linnæus as a variety too minute even to enter the province of Botany; and therefore the various names‡, which have been given to these distinctions, are to be neglected as impertinent in this science, though for the purposes of gardening they have their use.

Y

The

* *Perficaria cum maculis ferrum equinum referentibus.*

(Tourn.)

Ranunculus hederaceus atra macula notatus.

Orchis palmata palustris maculata (C. B.)

Hieracium alpinum maculatum (Tourn.)

Lactuca maculosa (C. B.)

† *Eryngium latifolium planum caule ex viridi pallescente flore albo* (Tourn.)

Abrotanum cauliculis albicantibus (Tourn.)

Artemisia vulgaris major caule ex viridi albicante (Tourn.)

Atriplex hortensis rubra (C. B.)

Amaranthus sylvestris maximus Novæ Angliæ spicis purpureis (Tourn.)

Portulaca fativa foliis flavis (Moris.)

Lactuca capitata rubra (B.)

‡ *Poma Paradisiaca*

Prasomila

Rubelliana

Borstorphiæ

Appiana

Melimela

Pyra Falerna

Favonia

Boni Christiana

Crustamina

Picena

Libraria

The VIRTUES and USES of plants furnish no specific difference; and the distinctions therefore of physical writers are not always to be depended on.

The DURATION of plants is no sure mark of distinct species, being often owing rather to the place than to the nature of the plant. In warm regions, plants that are annual with us will become perennial or arborecent; as is found in *Tropæolum*, *Beta*, *Majorana*, *Malva arborea*, &c. And on the contrary, cold regions will occasion perennial plants to become annual; as is observed in *Ricinus*, *Mirabilis*, &c.†

MULTITUDE or quantity is an accidental circumstance in plants, and cannot conclude any thing, whether the increase be of the plant itself, or of its roots, stems, leaves, or fructification.

PUBESCENCE is an uncertain mark; as by culture and change of soil plants are subject to lose as well their spines as their hair or down.

LEAVES, though they for the most part furnish most elegant specific differences, as has been observed in the last chapter, are yet subject to luxuriation in the same species, which must be carefully distinguished. This may respect their opposition and composition, and also their being crisp (curled) or bullate (bladdery).

In respect to opposition, opposite leaves will sometimes become tern, quatern, or quine, growing by threes, fours, or fives; and then the stem also from quadrangular, square, will become polygynous, of many sides*.

In

* *Lyfimachia lutea major foliis ternis* (Tourn.)

Lyfimachia lutea major foliis quaternis (Tourn.)

Lyfimachia lutea major foliis quinis (Tourn.)

Anagallis cærulea foliis binis ternive ex adverso nascentibus (Raj.)

† *Anagallis Phœnicea foliis amplioribus ex adverso quaternis* (T.)

Salsicaria trifolia caule Hexagono (Tourn.)

† *Ricinus* and *Mirabilis* are naturally perennial plants, and are only killed by frost in cold countries.

In respect to composition, digitate leaves will frequently gain an addition of one or more folioles*.

Crisp, curled leaves, are a very frequent variety. In *Tanacetum*, *Mentha*, *Ocymum*, and *Matricaria*, which are scented plants, there is a singularity observable, that when the leaves are curled, the scent is heightened by the crispature†.

Bullate, bladdery leaves are generally produced from such as are rugose, wrinkled, and this is owing to the increase of the substance of the leaf within its vessels which occasions it to swell and rise: In the *Saponaria concava Anglicana* a bullate leaf is produced in a singular manner from the defect of wrinkles; for here the margin of the leaf contracting itself, the leaves become hollow like a spoon‡.

Plants are sometimes found to vary from broad leaved to narrow leaved; but this variation is less frequent§.

MONSTROUS flowers, such as the multiplicate, full, or proliferous, derive their origin from natural ones, and

Y 2

therefore

* *Trifolium quadrifolium hortense album* (C. B.)

† *Malva crispa* (J. B.)

Mentha crispa Danica (Park.)

Tanacetum foliis crispis (C. B.)

Matricaria crispa.

Ocymum latifolium maculatum vel crispum (C. B.)

‡ *Ocymum foliis bullatis* (C. B.)

Brassica undulata (Renealm.)

Lactuca capitata foliis magis rugosis (B.)

Lactuca capitata major foliis rugosis et contortis (B.)

Lactuca capitata omnium maxima verrucosa (B.)

§ *Heracleum hirsutum foliis angustioribus* (C. B.)

Lycopus foliis in profundas lacinias incisus (Tourn.)

Brassica angusto apii folio (C. B.)

Veronica Austriaca foliis tenuissime laciniatis (Tourn.)

Sambucus laciniato folio (C. B.)

Sonchus asper laciniatis (C. B.)

Valeriana sylvestris foliis tenuissime divisis (C. B.)

therefore are to be considered only as a variety from luxuriance.

Upon the whole, the change of soil is found to have a great effect on the nature of plants; and so this many of the varieties above-mentioned must be imputed; as in *Buxus*, *Xanthium*, *Acanthus*, *Cinara*, *Prunella*, *Myosotis*, *Crista galli* and *Cerinthæ* §; which would all return to their old conditions if the soil were changed again. And in like manner the improvements which are made by culture in the plants cultivated for sale, as in *Vitis*, *Malum*, *Pyrus*, *Amygdalus*, *Persica*, *Asparagus*, *Cerasus*; and in grain, pulse, and fruit of all kinds are not to be esteemed as lasting: for all these, if left to themselves in a poor soil, would run off again, and resume the qualities they had when they grew wild.

The soil has some effect also upon the leaves; for though it is less common for the leaves to differ on the same plant, as they do in some species of *Lepidium*, *Tithymalus*, *Rudbeckia*, and *Hibiscus* ||; yet it is observed, that watery soils are apt to produce a division in the lower leaves of the plant, and even to render capillary such as are produced under the water; as in some species of *Ranunculus* and *Sisymbri-*

§ *Buxus arborescens* (C. B.) *Buxus humilis* (Dod.)
Xanthium (Dod.) *Xanthium Canadense majus* (Tourn.)
Acanthus mollis (C. B.) *Acanthus aculeatus* (C. B.)
Cinara aculeata (C. B.) *Cinara non aculeata* (C. B.)
Brunella (Dod.) *Brunella cæruleo magno flore* (C. B.)
Myosotis foliis hirsutus (H. C.) et *foliis glabris* (H. C.)
Crista galli femina (J. B.) et *mas:* (J. B.)
Cerinthæ flore ex rubro purpurascente (C. B.) et *flavo flore inferior* (C. B.)

|| *Tithymalus heterophyllus* (Plum: Pluk: Alm: 112: f. 6.)
Rudbeckia foliis inferioribus trilobis, superioribus indivisis
 (Hort. Upsal.)
Hibiscus foliis inferioribus integris, superioribus tribolis.
 (Hort. Cliff.)
Lepidium foliis caulinis pinnato-multifidis, rameis cordatis amplexicaulibus integris (H. C.)

um*; and also in *Cicuta*, *Sium*, *Phellandrium*, *Oenanthe*, &c. And on the contrary, that mountainous plants usually have their upper leaves more divided, their lower ones more entire; as in *Pimpinella*, *Petroselinum*, *Anisum*, and *Coriandrum*.

Varieties may generally be explained and reduced under their proper species with ease, by conferring the variable marks of the variety with the natural plant: But there are some few which are attended with difficulty, and require judgment and experiences as in some species of *Helleborus*†, *Gentiana*‡, *Fumaria*§, *Valeriana*||, *Scorpiurus*¶, and *Medicago***.

* *Rapunculus aquaticus folio rotundo et capillaceo* (C. B.)
Sisymbrium foliis simplicibus dentatis ferratis (H. C.)

† *Helleborus aconiti folio, flore globofo croceo* (Amm. ruth. 101.) *Trollius humilis flore patulo* (Buxb. cent. 1. p. 15. l. 22.) *Varietas Hellebori Trollii* (Fl. Suec. 475.) *Nectariis longitudine corollæ.*

‡ *Gentiana corolla hypocrateriformi. Tubo villis clauso, calycis foliis alternis majoribus* (Fl. Lap. 94.) *Varietas gentianæ fauce barbata* (Fl. Suec. 203.) *flore quadrifido et calycinis lacinjis alternis duplo latioribus.*

§ *Fumaria bulbosa radice cava et non cava major et minor.*

|| *Valeriana arvensis præcox humilis, semine compresso* (T.)
Valeriana, arvensis præcox humilis, foliis ferratis (T.)
Valeriana arvensis serotina altior, semine turgidiore (Mor.)
Valeriana semine umbilicato nudo rotundo (Moris.)
Valeriana semine umbilicato nudo oblongo (Moris.)
Valerianella semine umbilicato hirsuto majore (Moris.)
Valerianella semine umbilicato hirsuto minore (Moris.)
Valerianella Cretica, fructu vesicario (Tourn. Cor.)
Valerianella semine stellato (C. B.)

¶ *Scorpioides filiqua campoide hispida* (J. B.)
Scorpioides filiqua cochleata & striata Uliffiponenfis (T.)
Scorpioides Bupleuri folio filiquis levibus (Park.)
Scorpioides filiqua crassa. (Boelii. Ger.)

** *Medicago leguminibus cochleatis, stipulis dentatis, caule diffuso* (H. C.)

scutellata

respect to the *Fumaria* in question, it is known to be one species only, by the minuteness of its perianthium, the scale of its bud, the structure of its leaves, the situation of the branch, the place of the bractæ, the corolla, filiqua, seeds, and stigma; but it varies in the division of its bractæ, and in the root being more or less hollow. And that the *Valerians* here spoken of are all the same species, though they differ so greatly in the fruit, and often in having their leaves more cut, is also proved from their dichotomous stems and annual roots, and from the structure of their leaves, corollæ and seeds. Nor should the species of *Scorpiurus* and *Medicago* here instanced be either of them parted, although there is so remarkable a diversity in the fruit of the individuals. In the *Medicago** in particular, the forms of the real snails, which nature has imitated in these plants, are scarce more diversified than is the fruit of this mimic species; so that the Botanist, who is studious of varieties, would hardly find any end to his labour, of pursuing nature through the various shapes which she has so wantonly adopted.

The whole order of the *Fungi*, to the scandal of the science, is still a chaos, the botanists not being able in these to decide with certainty what is a species, and what a variety.

* <i>Medicago</i> <i>scutellata</i>	<i>hirsuta</i>
<i>orbiculata</i>	<i>lupulina</i>
<i>echinata</i>	<i>spinosa</i>
<i>turbinata</i>	<i>rugosa</i>
<i>coronata</i>	<i>polycarpus</i>
<i>doliata</i>	<i>dicarpus</i>
<i>ciliaris</i>	<i>Arabica</i>
<i>tornata</i>	<i>Cretica</i>

Explanation of the TABLES, with some hints concerning the manner of studying the Science of Botany by the help of this book.

THE first table is divided into three columns; the first of which contains the names of the genera admitted by Linnæus, alphabetically disposed; the second, the English names, where there are any that have been commonly received; and the last, the names of the classes and orders, to which the genera respectively belong.

The second table is likewise divided into three columns; the first of which contains the generic names that are now out of use, alphabetically disposed; the second, the English names that have been given to them; and the third, the names of the Linnæan genera, under which they are respectively to be sought in the first table.

By the help of these tables, the reader will be enabled to find the class and order of any plant he may propose to examine, after he has informed himself of its botanic name: For if the name given him be not the same admitted by the author we have followed, and consequently not to be met with in the first table, he will probably find it in the second, which will refer him to the first.

By these tables, properly used, in conjunction with the book itself, it is conceived, that the reader may arrive not only at an acquaintance with the principles of the science, but even at a practical knowledge of the distinctions of vegetables, much sooner than he could by reading the descriptions, and inspecting the figures given by old writers, whose collections are either without method, or disposed according to such systems as have been exploded; for by what we have laid before them, he will be enabled to consult the
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productions of nature, and compare them with what is delivered in the book ; or, in other words, to mix the practice with the theory ; without which the study of this science would be dry and tasteless, and the progress made in it of little advantage. As we cannot but recommend this useful amusement to the reader in the strongest manner, so we shall attempt to assist him farther, by a few hints for the methodizing of his endeavours.

The first thing he should aim at is, to get a thorough knowledge of the distinctions of the twenty-four classes. In order to this, the first part of this book should be previously perused, as the parts of fructification are therein explained ; without which the classes could not be understood. Then let him gather some of the ordinary flowers, such as the blossoms of the fruit-garden or kitchen-ground, or the ornamental flowers of his borders, and bring them by turns into his closet for examination, chusing first the larger kinds, and such as naturally expand and discover the stamina and pistillum ; and when he has accustomed himself to know the parts of fructification in these easier kinds, he may then try such as require being stript of their covers, or dissected with a penknife, to discover their inner parts, or whose minuteness requires the assistance of a magnifying glass for the observing them properly. The double flowers should be avoided, as being unnatural. Having fixed on the flower he would first examine, he will, by the help of the tables, be informed of the class it belongs to ; then turning to the chapter of the second part of the book, which treats of that class, let him carefully read over the character there given of the class, and compare his flower therewith ; a frequent practice of this will soon make him retain the names of the classes, and their several distinctions.

When he has arrived thus far, he may begin to try his strength, by deciding always first himself upon the class, before he turns to the book ; and he will
be

be now qualified to begin the study of the orders ; which he may pursue after the same method as he did the classes, finding the orders out first by the tables, reading their characters, and comparing them with the flower, till he has gained a clear notion of their several distinctions ; after which, he should in like manner attempt to declare the order himself.

The subdivisions also of the orders, though they are not made part of the systematic distribution of vegetables, yet are well worth his attention ; as in some of the extensive orders it would be more troublesome to detect the genus of any flower, if the genera contained in the order were parcelled out under such convenient distinctions. By these divisions, the reader will be led to decide on any plant within a very few genera. And here we must take leave of him, and refer the rest of the work to his own industry ; for though we have laid down the principles of both generic and specific distinctions, the former in the second, and the latter in the third part of this work, yet it was impossible to include even the characters of the genera in a work of this compass, much less to have entered upon an enumeration or description of the several species.

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TABLE I.

GENERA.	ENGLISH NAMES	CLASSES and ORDERS.
Abroma		Polyadelphia, Pentandria
Abrus		Diadelphia, Decandria
Acaena		Tetrandria, Monogynia
Acalypha		Monoecia, Monadelphia
Acanthus	Bears Breech	Didynamia, Angiosper.
Acer	Maple	Polygamia, Monoecia
Achania		Monadelphia, Polyandria
Achillea	Milfoil	Syngenesia, Polyg. sup.
Achras	Sapota	Hexandria, Monogynia
Achyranthes		Pentandria, Monogynia
Acnida		Dioecia, Pentandria
Aconitum	Woolfsbane	Polyandria, Trigynia
Acorus	Sweet Rush	Hexandria, Monogynia
Acrostichum		Cryptogamia, Filices
Actæa	Herb Christopher	Polyandria, Monogynia
Adansonia	Æthiopian Sourgourd	Monadelphia, Polyandria
Adelia		Dioecia, Monadelphia
Adenanthera	Bastard Flower-fence	Decandria, Monogynia
Adiantum	Maiden Hair	Cryptogamia, Filices
Adonis	Bird's Eye	Polyandria, Polygynia
Adoxa	Tuberous Moschatel or hollow Root	Octandria, Tetragynia
Ægilops		Polygamia, Monoecia
Ægiphila		Tetrandria, Monogynia
Ægopodium	Herb Gerard, Gout-wort	Pentandria, Digynia
Ægopricon		Monoecia, Monandria
Æschynomene	Bastard fenitive plant	Diadelphia, Decandria
Æsculus	Horse Chestnut	Heptandria, Monogynia
Æthusa	Lesser Hemlock, or Fools Parsley	Pentandria, Digynia
Agapanthus		Hexandria, Monogynia
Agaricus	Agaric	Cryptogamia, Fungi
Agave	American Aloe	Hexandria, Monogynia
Ageratum	Bastard Hempmony	Syngenesia, Polyg. æqu.
		Agrimony

TABLE I.

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Agrimonia	Agrimony	Dodecandria, Digynia
Agrostemma	Campion, or wild Lich- nis	Decandria, Pentagynia
Agrostis		Triandria, Digynia
Agryneia		Monoecia, Gynandria
Ailanthus		Polygamia, Monoecia
Aira		Triandria, Digynia
Aitonia		Monadelphia, Octandria
Ajuga	Bugle	Didynamia, Gymnosperm.
Aizeon		Icosandria, Pentagynia
Albuca		Hexandria, Monogynia
Alcea	Hollyhock, or Rose- mallow	Monadelphia, Polyandria
Alchemilla	Ladies Mantle	Tetrandria, Monogynia
Aldrovanda		Pentandria, Pentagynia
Aletris		Hexandria, Monogynia
Alisma	Water Plantain	Hexandria, Polygynia
Allamanda		Pentandria, Monogynia
Allionia		Tetrandria, Monogynia
Allium	Garlic	Hexandria, Monogynia
Allophyllus		Octandria, Monogynia
Aloe		Hexandria, Monogynia
Alopecurus	Fox-tail Grass	Triandria, Digynia,
Alpinia		Monandria, Monogynia
Alfina	Chickweed	Pentandria, Trigynia
Alstromeria		Hexandria, Monogynia
Althæa	Marshmallow	Monadelphia, Polyandria
Alyssum	Madwort	Tetradynamia, Siliculolofa
Amaranthus	Amaranth, or Flower- gentle	Monoecia, Pentandria
Amaryllis	Lilly Daffodil	Hexandria, Monogynia
Ambrosia		Monoecia, Pentandria
Ambrosinia		Gynandria, Polyandria
Amellus		Syngenesia, Polyg. superflua
Amethystea		Diandria, Monogynia
Ammannia		Tetrandria, Monogynia
Ammi	Bishop's weed	Pentandria, Digynia
Amomum	Ginger	Monandria, Monogynia
Amorpha	Bastard Indigo	Diadelphia, Decandria
Amygdalus	Almond	Icosandria Monogynia

GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Amyris		Ocandria, Monogynia
Anabasis	Berry-bearing Glassewort	Pentandria, Digynia
Anacardium	Acajou, or Cashew-nut	Decandria, Monogynia
Anacyclus		Syngenesia, Polyg. superflua
Anagallis	Pimpernel	Pentandria, Monogynia
Anagyris	Stinking Bean Trefoil	Decandria, Monogynia
Anastatica	Rose of Jericho	Tetradynamia, Siliculo.
Anchusa	Bugloss	Pentandria, Monogynia
Andrachne	Bastard Orpine	Monoecia, Gynandria
Andromeda		Decandria, Monogynia
Andropogon		Polygamia, Monoecia
Androsace		Pentandria, Monogynia
Andryala	Downy Sow-thistle	Syngenesia, Polyg. equi.
Anemone	Wind Flower	Polyandria Polygynia
Anethum	Dill	Pentandria, Dygynia
Angelica		Pentandria, Digynia
Anguria		Monoecia, Diandria
Annona	Custard Apple	Polyandria, Polygynia
Anthemis	Chamomile	Syngenesia, Polyg. superflua
Anthericum	Spiderwort (Phalangium)	Hexandria, Monogynia
Anthistiria		Polygamia, Monoecia
Anthocerus		Cryptogamia, Algæ
Antholyza		Triandria, Monogynia
Anthospermum	Amber Tree	Polygamia, Dioecia
Anthoxanthum	Vernal Grass	Diandria, Digynia
Anthyllis	Kidney Vetch, or Lady's Finger	Diadelphia, Decandria
Antidesma		Dioecia, Pentandria
Antirrhinum	Snap Dragon, or Calves Snout	Didynamia, Angiosper.
Apactis		Dodecandria, Monogynia
Apeiba		Polyandria, Monogynia
Aphanes		Tetrandria, Monogynia
Aphyllanthes		Hexandria, Monogynia
Aphyteia		Monadelphia, Triandria
Apium	Parsley	Pentandria, Digynia
Apluda		Polygamia, Monoecia
Apocynum	Dogs-bane	Pentandria, Digynia

Apono.

GENERAL ENGLISH NAMES. CLASSES and ORDERS.

Aponogetum		Heptandria, Tetragynia
Aquartia		Tetrandria, Monogynia
Aquilegia	Columbine	Polyandria, Pentagynia
Aquilicia		Pentandria, Monogynia
Arabis	Bastard Tower Mustard	Tetradynamia, Siliquos.
Arachis	Ground Nut	Diadelphia, Decandria
Aralia	Berry-bearing Angelica	Pentandria, Pentagynia
Arbutus	Strawberry-tree	Decandria, Monogynia
Arctium	Burdock	Syngenesia, Polyg. æqu.
Arctopus		Polygamia, Dioecia
Arctotis		Syngenesia, Polyg. neces- saria
Ardisia		Pentandria, Monogynia
Arduina		Pentandria, Monogynia
Areca		Appendix, Palmæ
Arenaria		Decandria, Trigynia
Arethusa		Gynandria, Diandria
Aretia		Pentandria, Monogynia
Argemone	Prickly Poppy	Polyandria, Monogynia
Argophyllum		Pentandria, Monogynia
Aristea		Triandria, Monogynia
Aristida		Triandria, Digynia
Aristolochia	Birthwort	Gynandria, Hexandria
Aristotelia		Dodecandria, Trigynia
Arnica		Syngenesia, Polyg. super- flua
Artemisia	Mugwort	Pentandria, Digynia
Artemisia		Syngenesia, Polyg. super- flua
Artocarpus	Bread fruit	Monoecia, Monandria
Arum	Wake Robin, or Cuc- kow Pint	Gynandria, Polyandria
Arundo	Reed	Triandria, Digynia
Asarum	Asarabacca	Dodecandria, Monogynia
Asclepias	Swallow-wort	Pentandria, Digynia,
Ascyrum	St. Peter's wort	Polyadelphia, Polyandr.
Aspalathus	African Broom	Diadelphia, Decandria
Asparagus		Hexandria, Monogynia
Asperugo	Small wild Bugloss, or Great Goose Grass	Pentandria, Monogynia
Asperula	Woodroof	Tetrandria, Monogynia
Asphodelus	Asphodel, or King's ipcar	Hexandria, Monogynia
		Asplenium

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
<i>Asplenium</i>	Spleenwort, or Milt-waste	Cryptogamia, Filices
<i>Aster</i>	Starwort	Syngenesia, Polyg. super.
<i>Astragalus</i>	Liquorice Vetch, or Milk Vetch	Diadelphia, Decandria
<i>Astrantia</i>	Black Masterwort	Pentandria, Digynia
<i>Astronium</i>		Dioecia, Pentandria
<i>Athamanta</i>	Spignel	Pentandria, Digynia.
<i>Athanasia</i>		Syngenesia, Polyg. æqu.
<i>Atractylis</i>	Distaff Thistle	Syngenesia, Polyg. æqu.
<i>Atragene</i>		Polyandria, Polygynia
<i>Atraphaxis</i>		Decandria, Digynia
<i>Atriplex</i>	Orach	Polygamia, Monoecia
<i>Atropa</i>	Deadly Nightshade	Pentandria, Monogynia
<i>Aucuba</i>		Monoecia, Tetrandria
<i>Avena</i>	Oats	Triandria, Digynia
<i>Averrhoa</i>		Decandria, Pentagynia
<i>Avicennia</i>		Didynamia, Angiosper.
<i>Axyris</i>		Monoecia, Triandria
<i>Ayenia</i>		Gynandria, Pentandria
<i>Azalea</i>	American upright Honeyfuckle	Pentandria, Monogynia

B

<i>Baccharis</i>	Plowman's Spikenard	Syngenesia Polyg. super.
<i>Backea</i>		Octandria, Monogynia
<i>Ballota</i>	Black Horehound	Didynamia, Gymnosperm.
<i>Baltimora</i>		Syngenesia, Polyg. Nec.
<i>Banisteria</i>		Decandria, Trigynia
<i>Bankia</i>		Tetrandria, Monogynia
<i>Barleria</i>		Didynamia, Angiosperm.
<i>Barnadesia</i>		Syngenesia, Polyg. æqu.
<i>Bartia</i>		Didynamia, Angiosperm.
<i>Basella</i>	Malabar Nightshade	Pentandria, Trigynia
<i>Bassia</i>		Dodecandria, Monogynia
<i>Batis</i>		Dioecia, Tetrandria
<i>Bauhinia</i>	Mountain Ebony	Decandria, Monogynia
<i>Befaria</i>		Dodecandria, Monogynia
<i>Begonia</i>		Polygamia, Monoecia
<i>Bellis</i>	Daisy	Syngenesia, Polyg. super.
<i>Bellium</i>		Syngenesia, Polyg. super.
<i>Bellonia</i>		Pentandria, Monogynia
		Berberis

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Berberis	Berberry, or Piperidge Bush	Hexandria, Monogynia
Bergia		Decandria, Pentagynia
Besleria		Didynamia, Angiosper.
Beta	Beet	Pentandria, Digynia
Betonica	Betony	Didynamia, Gymnosperm.
Betula	Birch	Monoecia Triandria
Bidens	Water Hemp Agrimony	Syngenesia, Polyg. æqu.
Bignonia	Trumpet Flower	Didynamia, Angiosper.
Biscutella	Buckler Mustard	Tetradynamia, Siliculosa
Biserrula		Diadelphia, Decandria
Bixa	Anotta	Polyandria, Monogynia
Bladhia		Pentandria, Monogynia
Blæria		Tetrandria, Monogynia
Blakea		Dodecandria, Monogynia
Blasia		Cryptogamia, Algæ
Blechnum		Cryptogymia, Filices
Blitum	Strawberry Spinage, or Blite	Monandria, Digynia
Bobartia		Triandria, Digynia
Bocconia		Dodecandria, Monogynia
Boerhavia	Hogweed of the Americans	Monandria Monogynia
Boletus		Cryptogymia Fungi
Boltonia		Syngenesia, Polyg. super
Bombax	Silk Cotton Tree	Monadelphia, Polyandria
Bontia		Didynamia, Angiosper.
Borassus		Appendix, Palmæ
Borbonia		Diadelphia, Decandria
Borago	Borrage	Pentandria, Monogynia
Bosca	Yerva mora, or Golden Rod Tree	Pentandria, Digynia
Brabejum	African Almond	Tetrandria, Monogynia
Brassica	Cabbage	Tetradynamia, Siliquosa
Brathys		Polyandria Pentagynia
Briza		Triandria, Digynia
Bromelia	Ananas, or Pine Apple	Hexandria, Monogynia
Bromus		Triandria, Digynia
Brossæa		Appendix Palmæ
Brossimum		Dioccia, Monandria
Browallia		Didynamia, Angiosper.
Brownea		Monadelphia, Endecan.

Brucea

GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Brucea		Dioecia Tetrandria,
Brunia		Pentandria Monogynia
Brunsfelfia		Pentandria Monogynia
Bryonia	Bryony	Monoecia, Syngenesia
Bryum		Cryptogamia, Musci
Bubon	Macedonian Parsley	Pentandria, Digynia
Buchnera		Didynamia, Angiosper.
Bucida		Decandria, Monogynia
Buddleja		Tetrandria, Monogynia
Bufonia		Tetrandria, Digynia
Bulbocodium		Hexandria, Monogynia
Bumalda		Pentandria, Digynia
Bunias		Tetradynamia Siliquosa
Bunium	Pignut, or Earth-nut	Pentandria, Digynia
Bupthalmum	Ox Eye	Syngenesia, Polyg. sup.
Bupleurum	Hare's Ear	Pentandria, Digynia
Burmanna		Hexandria, Monogynia
Burfera		Hexandria, Monogynia
Butomus	Flowering Rush, or Water Gladiolus	Enneandria, Hexagynia
Butonica		Monadelphia, Polyandria
Buxbaumia		Cryptogamia, Musci
Buxus	Box	Monoecia, Tetrandria
Byssus		Cryptogamia, Algæ
Butneria		Pentandria, Monogynia
Bystropogon		Didynamia Gymnosperm.

C

Cacalia	Alpine Colt's-foot	Syngenesia, Polyg. æqu.
Cachrys		Pentandria, Digynia
Cacalpinia	Brasileto	Decandria, Monogynia
Cactus	Melon Thistle	Icosandria, Monogynia
Calamus		Hexandria, Monogynia
Calea	Marigold	Syngenesia, Polyg. æqu.
Calceolaria		Diandria, Monogynia
Calendula		Syngenesia, Polyg. necessaria
Calla	African Arum	Gynandria, Polyandria
Callicarpa	Johnsonia	Tetrandria, Monogynia
Calligonum		Polyandria, Digynia
Callisia		Triandria, Monogynia
		Callitriche

TABLE I.

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Callitriche	Water Chickweed	Monandria, Digynia
Calodendron		Pentandria, Monogynia
Calophyllum		Polyandria, Monogynia
Caltha	Marsh Marigold	Polyandria, Polygynia
Calycanthus		Icosandria, Polygynia
Cambogia		Polyandria, Monogynia
Camellia		Monadelphia, Polyandria
Cameraria		Pentandria, Monogynia
Campanula	Bell-flower	Pentandria, Monogynia
Camphorosma		Tetrandria, Monogynia
Canarina		Hexandria, Monogynia
Canarium		Dioecia, Pentandria
Canella		Dodecandria, Monogynia
Canna	Indian flowering Reed	Monandria, Monogynia
Cannabis	Hemp	Dioecia, Pentandria
Capparis	Caper bush	Polyandria, Monogynia
Capraria	Sweet weed	Didynamia, Angiosper.
Capficum	Guinea pepper	Pentandria, Monogynia
Cardamine	Lady's smock	Tetradynamia, Siliquosa
Cardiospermum	Heart-iced, or heart-pea	Octandria, Trigynia
Carduus	Thistle	Syngenesia, Polyg. æqu.
Carex		Monoecia, Triandria
Carica	Papaw	Dioecia, Decandria
Carissa		Pentandria, Monogynia
Carlina	Carline thistle	Syngenesia, Polyg. æqu.
Carolinea		Monadelphia, Polyandria
Caroxylon		Pentandria, Monogynia
Carpesium		Syngenesia, Polyg. super.
Carpinus	Hornbeam	Monoecia, Polyandria
Carthamus	Bastard Saffron	Syngenesia, Polyg. æqu.
Carum	Carui, or caraway	Pentandria, Digynia
Caryocar		Pentandria, Tetragynia
Caryophyllus	Clove tree	Polyandria, Monogynia
Caryota		Appendix, Palmæ
Cassia	Wild fenna	Decandria, Monogynia
Cassine	Cassioberry bush	Pentandria, Trigynia
Cassya		Enneandria, Monogynia
Castilleja		Didynamia, Angiosperm.
Casuarina		Monoecia, Monandria
Catananche	Candy Lion's foot	Syngenesia, Polyg. æqu.

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Catebæa	Lilly thorn	Tetrandria, Monogynia
Caturus		Dioecia, Diandria
Caucalis	Bastard parsley	Pentandria, Digynia
Ceanothus	New Jerley tea	Pentandria, Monogynia
Cecropia		Dioecia, Diandria
Cedrela		Pentandria, Monogynia
Celastrus	Staff tree	Pentandria, Monogynia
Celosia	Cock's comb	Pentandria, Monogynia
Celfia		Didynamia, Angiosper.
Celtis	Nettle tree	Polygamia, Monoecia
Cenchrus		Polygamia, Monoecia
Centaurea	Centaury	Syngenesia, Polyg. fruf- tranea
Centella		Monoecia, Tetrandria
Centunculus		Tetrandria, Monogynia
Cephalanthus	Button wood	Tetrandria, Monogynia
Cerastium	Moufe-ear chickweed	Decandria, Pentagynia
Ceratocarpus		Monoecia, Monandria
Ceratonia	Carob tree, or St John's bread	Polygamia, Polyocia
Ceratophyl- lum	Horned Pondweed	Monoecia, Polyandria
Cerbera		Pentandria, Monogynia
Cercis	Judas tree	Decandria, Monogynia
Ceriathe	Honeywort	Pentandria, Monogynia
Ceropegia		Pentandria, Monogynia
Cestrum	Bastard Jasmine	Pentandria, Monogynia
Chærophyl- lum	Wild chervil	Pentandria, Digynia
Chalcas		Decandria, Monogynia
Chamærops	Dwarf palm, or pal- metto	Appendix, Palmæ
Chamira		Tetradynamia, Siliquosa
Chæra		Cryptogamia, Algæ
Cheiranthus	Stock July flower	Tetradynamia, Siliquosa
Chelidonium	Celandine	Polyandria, Monogynia
Chelone		Didynamia, Angiosper.
Chenolca		Pentandria, Monogynia
Chenopodium	Goose-foot, or wild Orach	Pentandria, Digynia
Cherleria		Decandria, Trigynia
Chiococca		Pentandria, Monogynia

Chic.

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Chionanthus	Snowdrop-tree, or fringe-tree	Diandria, Monogynia
Chironia		Pentandria, Monogynia
Chlamydia		Hexandria, Monogynia
Chlora		Ostendria, Monogynia
Chloranthus		Tetrandria, Monogynia
Chondrilla	Gum succory	Syngenesia, Polyg. æqu.
Chrysanthemum	Corn marigold	Syngenesia. Polyg. supe.
Chrysitrix		Polygamia, Dioecia
Chrysobalanus	Cocœa plumb	Icosandria, Monogynia
Chrysocoma	Golden locks	Syngenesia, Polyg. æqu.
Chrysogonum		Syngenesia, Polyg. æqu.
Chrysophyllum	Star-apple	Pentandria, Monogynia
Chrysosplenium	Golden saxifrage	Decandria, Digynia
Cicca		Monoecia, Tetrandria
Cicer	Chick pease	Diadelphia, Decandria
Cichorium	Succory, or endive	Syngenesia, Polyg. æqu.
Cicuta	Water hemlock	Pentandria, Digynia
Cimicifuga		Polyandria, Tetragynia
Cinchona		Pentandria, Monogynia
Cineraria		Syngenesia, Polyg. supe.
Cinna		Monandria, Digynia
Circæa	Enchanter's nightshade	Diandria, Monogynia
Cissampelos		Dioecia, Monadelphia
Cissus		Tetrandria, Monogynia
Cistus	Rock rose	Polyandria, Monogynia
Citharexylon	Fiddle wood	Didynamia, Angiosperm.
Citrus	Citron	Polyadelphia, Icosandria
Clathrus		Cryptogamia, Fungi
Clavaria		Cryptogamia, Fungi
Claytonia		Pentandria, Monogynia
Clematis	Virgin's bower	Polyandria, Polygynia
Cleome	Buffard mustard	Tetradynamia, Siliquos.
Cleonia		Didynamia, Gymnosperm.
Clerodendrum		Didynamia, Angiosperm.
Clethra		Decandria, Monogynia
Cleyera		Polyandria, Monogynia
Clebadium		Monoecia, Pentandria
Cliffortia		Dioecia, Polyandria

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Clinopodium	Field basil	Didynamia, Gymnosperm.
Clitoria		Diadelphia, Decandria
Clusia	Balsam tree	Polygamia, Monoecia
Cluytia		Dioecia, Gynandria
Clypeola	Treacle mustard	Tetradynamia, Siliculos.
Cneorum	Widow-wail	Triandria, Monogynia
Cnicus	Blessed thistle	Syngenesia, Polyg. æqu.
Coccoloba		Ocandria, Trigynia
Cochlearia	Scurvy-grass, or spoon-wort	Tetradynamia, Siliculo.
Cocos	Cocoa-nut	Palmæ
Codia		Ocandria, Digynia
Codon		Decandria, Monogynia
Coffea	Coffee-tree	Pentandria, Monogynia
Coix	Job's tears	Monoecia, Triandria
Colchicum	Meadow saffron	Hexandria, Trigynia
Coldenia		Tetrandria, Tetragynia
Collinsonia		Diandria, Monogynia
Columnea		Didynamia, Angiosperm.
Colutea	Bladder fenna	Diadelphia, Decandria
Comarum	March Cinquefoil	Icosandria, Polygynia
Combretum		Ocandria, Monogynia
Cometes		Tetrandria, Monogynia
Commelina		Triandria, Monogynia
Commerfonia		Pentandria, Pentagynia
Comocladia		Triandria, Monogynia
Comptomia		Monoecia, Triandria
Conserva		Cryptogamia, Algæ
Conium	Hemlock	Pentandria, Digynia
Connarus		Monadelphia, Decandr.
Conocarpus	Button tree	Pentandria, Monogynia
Convallaria	Lilly of the valley	Hexandria, Monogynia
Convolvulus	Bindweed	Pentandria, Monogynia
Conyza	Fleabane	Syngenesia, Polyg. supe.
Copaifera		Decandria, Monogynia
Corchorus	Jew's mallow	Polyandria, Monogynia
Cordia	Sebesten	Pentandria, Monogynia
Coreopsis	Tickseeded sunflower	Syngenesia, Polyg. frust.
Coriandrunt	Coriander	Pentandria, Digynia
Coriaria	Myrtle-leaved sumach	Dioecia, Decandria
Coris	Heath low pine	Pentandria, Monogynia
Corispermum	Tickseed	Monandria, Digynia

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Cornucopizæ		Triandria, Digynia
Cornus	Dogwood, or Cornelian cherry	Tetrandria, Monogynia
Cornutia		Didynamia, Angiosper.
Coronilla	Jointed podded colutea	Diadelphia, Decandria
Corrigiola		Pentandria, Trigynia
Cortufa	Bear's ear fanicle	Pentandria, Monogynia
Corylus	Hazel, or nut-tree	Monoecia, Polyandria
Corymbium		Syngenesia, Monogamia
Corynocarpus		Pentandria, Monogynia
Corypha		Palmæ
Costus		Monandria, Monogynia
Cotula		Syngenesia, Polyg. super.
Cotyledon	Navelwort	Decandria, Pentagynia
Crambe	Sea cabbage	Tetradynamia, Siliquos.
Crameria		Tetrandria, Monogynia
Craniolaria		Didynamia, Angiosper.
Crassula	Lesser orpine	Pentandria, Pentagynia
Cratægus	Wild service	Icolandria, Digynia
Crateva	Garlick pear	Dodecandria, Monogy.
Crepis	Bastard hawkweed	Syngenesia, Polyg. æqu.
Crescentia	Calabash tree	Didynamia, Angiosper.
Cressia		Pentandria, Digynia
Crinum	Asphodel lilly	Hexandria, Monogynia
Crithmum	Samphire	Pentandria, Digynia
Crocus	Saffron	Triandria, Monogynia
Crotalaria		Diadelphia, Decandria
Croton	Bastard ricinus	Monoecia, Monadelph.
Crucianella	Petty madder	Tetrandria, Monogynia
Cruzita		Diandria, Digynia
Crypsis		Tetrandria, Digynia
Cucubalus	Berry-bearing chickweed	Decandria, Trigynia
Cucumis	Cucumber	Monoecia, Syngenesia
Cucurbita	Gourd	Monoecia, Syngenesia
Cuminum	Cumin	Pentandria, Digynia
Cunila		Diandria, Monogynia
Cunonia		Decandria, Digynia
Cupania		Pentandria, Monogynia
Cuphea		Dodecandria, Monogynia
Cupressus	Cypress	Monoecia, Monadelph.
Curatella		Polyandria, Digynia
		Curcuma

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Curcuma	Turmeric	Monandria, Monogynia
Cuscuta	Dodder	Tetrandria, Monogynia,
Cuscuta		Tetrandria, Digynia ^b
Cussonia		Pentandria, Digynia
Cyanella		Hexandria, Monogynia
Cycas	Sago Palm	Palmæ
Cyclamen	Sowbread	Pentandria, Monogynia
Cylista		Diadelphia, Decandria
Cymbaria		Didynamia, Angiosper.
Cynanchum		Pentandria, Digynia
Cynara	Artichoke	Syngenesia, Polyg. æqu.
Cynoglossum	Hounds tongue	Pentandria, Monogynia
Cynometra		Decandria, Monogynia
Cynomorium		Monoecia, Monandria
Cynofurus	Dog's tail grass	Triandria, Digynia
Cyperus		Triandria, Monogynia
Cypripedium	Ladies slipper	Gynandria Diandria
Cyrilla		Didynamia, Angiosper.
Cyrtanthus		Hexandria, Monogynia
Cytinus		Gynandria, Dodecandria
Cytisus	Base tree trefoil	Diadelphia, Decandria

D

Dactylis	Cock's foot grass	Triandria, Digynia
Dais		Decandria, Monogynia
Dalbergia		Diadelphia, Octandria
Dalechampia		Monoecia, Monadelphia
Daphne	Mezereon, or spurge-laurel	Octandria, Monogynia
Datisca	Bastard hemp	Dioecia, Dodecandria
Datura	Thorn apple	Pentandria, Monogynia
Daucus	Carrot	Pentandria, Digynia
Decumaria		Dodecandria, Monogynia
Delphinium		Polyandria, Monogynia
Delima	Larkspur	Polyandria, Trigynia
Dentaria	Toothwort	Tetradynamia, Siliquosa
Deutzia		Decandria, Trigynia
Dialium		Diandria, Monogynia
Dianthera		Diandria, Monogynia
Dianthus	Pink, or clove July flower	Decandria, Digynia

Diapensia

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Diapensia		Pentandria, Monogynia
Dicksonia		Cryptogamia, Filices
Dictamnus	Fraxinella, or white dittany	Decandria, Monogynia
Didelta		Syngenesia, Polyg. Frust.
Digitalis	Fox glove	Didynamia, Angiosper.
Dilatris		Triandria, Monogynia
Dillenia		Polyandria, Polygynia
Diodia		Tetrandria, Monogynia
Dionæa	Venus' fly-trap	Decandria, Monogynia
Dioscorea		Dioecia, Hexandria
Diosma	African Spirea	Pentandria, Monogynia
Diospyrus	Indian date plumb	Octandria, Monogynia
Dipsacus	Teazel	Polygamia, Dioecia
Dirca	Leatherwood	Tetrandria, Monogynia
Disa		Gynandria, Diandria
Difandra		Heptandria, Monogynia
Dodartia		Didynamia, Angiosper.
Dodecatheon	Meadia	Pentandria, Monogynia
Dodonæa		Octandria, Monogynia
Dolichos		Diadelphia, Decandria
Doraena		Pentandria, Monogynia
Doronicum	Leopard's bane	Syngenesia, Polyg. super.
Dorstenia	Contrayerva	Tetrandria, Monogynia
Draba	Whitlow grafs	Tetradynamia, Siliquosa
Dracæna		Hexandria, Monogynia
Dracocephalum	Dragon's head	Didynamia, Gymnosperm.
Dracontium	Dragons	Gynandria, Polyandria
Drosera	Sundew	Pentandria, Pentagynia
Dryandra		Moniadelphia, Enneandria
Dryas		Icosandria, Polygynia
Drypis		Pentandria, Trigynia
Duranta		Didynamia, Angiosper.
Durio		Polyadelphia, Polyandria

E

Ebenus	Ebony of Crete	Diadelphia, Decandria
Echinophora	Prickly parsnip	Pentandria, Digynia
Echinops	Globe thistle	Syngenesia, Polyg. fegregata
		Echites

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Echites		Pentandria, Monogynia
Echium	Viper's bugloss	Pentandria, Monogynia
Eclipta		Syngenesia, Polyg. Superf.
Ehretia		Pentandria, Monogynia
Ekbergia		Decandria, Monogynia
Elæagnus	Wild olive	Tetrandria, Monogynia
Elæocarpus		Polyandria, Monogynia
Elæodendron		Pentandria, Monogynia
Elais		Palmæ
Elate		Palmæ
Elaterium		Monoecia, Monandria,
Elatine		Octandria, Tetragynia
Elephantopus	Elephant's foot	Syngenesia, Polyg. fægata
Ellisia		Pentandria, Monogynia
Elymus		Triandria, Digynia
Embothrium		Tetrandria, Monogynia
Empetrum	Black-berried heath or crow berries	Dioecia, Triandria
Empleurum		Monoecia, Tetrandria
Epacris		Pentandria, Monogynia
Ephedra	Shrubby horse-tail	Dioecia, Monadelphia
Epidendrum	Vanilla, or Vanelloe	Gynandria, Diandria
Epigæa	Trailing Arbutus	Decandria, Monogynia
Epilobium	Willow herb, or French willow	Octandria, Monogynia
Epimedium	Barrenwort	Tetrandria, Monogynia
Equisetum	Horse-tail	Cryptogamia, Filices
Eranthemum		Diandria, Monogynia
Erharta		Hexandria, Digynia
Erica	Heath	Octandria, Monogynia
Erigeron		Syngenesia, Polyg. superf.
Erinus		Didynamia, Angiosper.
Eriocaulon		Triandria, Trigynia
Eriocephalus		Syngenesia, Polyg. neces.
Eriophorum		Triandria, Monogynia
Etithalis		Pentandria, Monogynia
Erodium		Monadelphia, Pentandria
Ervum	Bitter vetch	Diadelphia, Decandria
Bryngium	Eryngo, or sea holly	Pentandria, Digynia,
Erysimum	Hedge mustard	Tetradynamia, Siliquosa
Erythrina	Coral tree	Diadelphia, Decandria

Eryth-

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Erythronium	Dog's-tooth violet	Hexandria, Monogynia
Erythroxylon		Decandria, Trigynia
Escallonia		Pentandria, Monogynia
Ethulia		Syngenesia, Polyg. æqu.
Eucalyptus		Icosandria, Monogynia
Euclea		Dioecia, Dodecandria
Eucomis		Hexandria, Monogynia
Eugenia		Icosandria, Monogynia,
Evolvulus		Pentandria, Tetragynia
Euonymus	Spindle tree	Pentandria, Monogynia
Eupatorium	Hemp agrimony	Syngenesia, Polyg. æqu.
Euphorbia	Burning thorny-plant or Spurge	Dodecandria, Trigynia
Euphrasia	Eyebright	Didynamia, Angiosper.
Eurya		Dodecandria, Monogynia
Exacum		Tetrandria, Monogynia
Exoecaria		Dioecia, Triandria.
F		
Fagara		Tetrandria, Monogynia
Fagonia		Decandria, Monogynia
Fagraea		Pentandria, Monogynia
Fagus	Beech	Monoecia, Polyandria
Falckia		Pentandria, Digynia
Ferraria		Gynandria, Triandria
Ferula	Fennel giant	Pentandria, Digynia
Festuca	Fescue grass	Triandria, Digynia
Fevillea		Dioecia, Pentandria
Ficus	Fig	Polygamia, Trioecia
Filago	Cotton weed	Syngenesia, Polyg. neces.
Flacourtia		Dioecia, Polyandria
Flagellaria		Hexandria, Trigynia
Fontinalis	Water moss	Cryptogamia, Musci
Forskohlea		Decandria, Pentagynia
Forstera		Gynandria, Diandria
Fothergilla		Polyandria, Digynia
Fragaria	Strawberry	Icosandria, Polygynia
Frankenia		Hexandria, Monogynia
Fraxinus	Ash	Polygamia, Dioecia
Fritillaria	Fritillary	Hexandria, Monogynia
Fuchsia		Octandria, Monogynia,
Fucus	Wrack, or sea-weed	Cyptogamia, Algæ
	B b	Fuirena

GENERA.	ENGLISH NAMES	CLASSES and ORDERS.
Fuirena		Triandria, Monogynia
Fumaria	Fumitory	Diadelphia, Hexandria
Fufanus		Polygamia, Monoecia
G		
Gahnia		Hexandria, Digynia
Galañthus	Snowdrop	Hexandria, Monogynia
Galax		Pentandria, Monogynia
Galaxia		Monadelphia, Triandria
Galega	Goat's rue	Diadelphia, Decandria
Galenia		Octandria, Digynia
Galeopsis	Hedge nettle	Didynamia, Gymnosf.
Gallium	Lady's bedstraw, or cheese rennet	Tetrandria, Monogynia
Galopina		Tetrandria, Digynia
Gai cilia	Mangostan	Dodecandria, Monogynia
Gardenia	Cape Jasmine	Pentandria, Monogynia
Garidella	Fennel-flower of Crete	Decandria, Trigynia
Gaultheria		Decandria, Monogynia
Gaura	Yellow Virginian loose- strife	Octandria, Monogynia
Genipa		Pentandria, Monogynia
Genista	Single-seeded broom	Diadelphia, Decandria
Gentiana	Gentian, or fellwort	Pentandria, Digynia,
Geoffroya		Diadelphia, Decandria
Geranium	Crane's bill	Monadelphia, Decandria
Gerardia		Didynamia, Angiosper.
Geropogon		Syngenesia, Polyg æqu.
Gesneria		Didynamia, Angiosper.
Geihyllis		Dodecandria, Monogynia
Geum	Aven's, or herb-bennet	Icosandria; Polygynia
Ginora		Dodecandria, Monogynia
Gisekia		Pentandria, Pentagynia
Glabraria		Polyadelphia, Polyandria
Gadiolus	Corn flag	Triandria, Monogynia
Glaux	Sea milkwort, or black saltwort	Pentandria, Monogynia
Glechoma	Ground ivy, or gill	Didynamia, Gymnosf.
Gleditsia	Three-thorned acacia	Polygamia, Dioecia
Glinus		Dodecandria, Pentagynia
Globba		Diandria, Monogynia

GENERA.

ENGLISH NAMES.

CLASSES and ORDERS

Globularia	Blue daisy	Tetrandria, Monogynia
Gloriosa	Superb lily	Hexandria, Monogynia
Gloxinia		Didynamia, Angiosper.
Gluta		Gynandria, Pentandria
Glycine	Carolina kidney-bean tree	Diadelphia, Decandria
Glycyrrhiza	Liquorice	Diadelphia, Decandria
Gmelina		Didynamia, Angiosper.
Gnaphalium	Cudweed	Syngenesia, Polyg. super.
Gnatum		Monoecia, Monadelphia
Gnidia		Octandria, Monogynia
Gomozia		Tetrandria, Digynia
Gomphrena	Globe amaranth	Pentandria, Digynia
Gonocarpus		Tetrandria, Monogynia
Gordonia		Monadelphia Polyandria,
Gorteria		Syngenesia, Polyg. frus- tranea
Gossypium	Cotton	Monadelphia, Polyandria
Govana		Polygamia, Monoecia
Gratiola	Hedge Hyssop	Diandria, Monogynia
Grewia		Gynandria, Polyandria
Grias		Polyandria, Monogynia
Grielum		Decandria, Pentagynia
Grisea		Octandria, Monogynia
Gronovia		Pentandria, Monogynia
Guarea		Octandria, Monogynia
Guajacum	Lignum vite, or pock-wood	Decandria, Monogynia
Guetarda		Monoecia, Heptandria
Guilandina	Bonduc, or Nickar tree	Decandria Monogynia
Gundelia		Syngenesia, Polyg. fe- gregata
Gunnera		Gynandria, Diandria
Gustavia		Monadelphia, Pol. a idria
Gypsophila		Decandria, Digynia

H

Hæmanthus	Blood flower	Hexandria, Monogynia
Hæmatoxy- lum	Logwood	Decandria, Monogynia
Haloragis		Octandria, Tetragynia

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Hallefia		Dodecandria, Monogynia
Halleria	African-fly honey- suckle	Didynamia, Angiosper.
Hamamelis	Witch hazel	Tetrandria, Digynia
Hamellia		Pentandria, Monogynia
Hasselquistia		Pentandria, Digynia
Havenia		Pentandria, Monogynia
Hebenstretia		Didynamia, Angiosper.
Hedera	Ivy	Pentandria, Monogynia
Hedycaria		Dioecia, Polyandria
Hedyotis		Tetrandria, Monogynia
Hedysarum	French honeysuckle	Diadelphia, Decandria
Heisteria		Decandria, Monogynia
Helenium	Bastard sunflower	Syngenesia, Poly. super.
Helianthus	Sun-flower	Syngenesia, Poly. frustr.
Heliconia		Pentandria, Monogynia
Heliicteres	Skrew tree	Gynandria, Decandria
Heliocarpus		Dodecandria, Digynia
Heliophila		Tetradynamia, Siliquos.
Heliotropium	Turnsole	Pentandria, Monogynia
Helonias		Hexandria, Trigynia
Helleborus	Black hellebore	Polyandria, Polygynia
Helvella		Cryptogamia, Fungi
Hemerocallis	Day lily, or lily As- phodel	Hexandria, Monogynia
Hemimeris		Didynamia, Angiosper.
Hemionitis	Mule's fern	Cryptogamia, Filices
Heracleum	Cow parsnip	Pentandria, Digynia
Hermannia		Monadelphia, Pentandria
Hermas		Polygamia, Monoecia
Hernandia	Jack in a box	Monoecia, Triandria
Herniaria	Rupturewort	Pentandria, Digynia
Hesperis	Dame's violet, rocket, or Queen's July flow.	Tetradynamia, Siliquos.
Heuchera		Pentandria, Digynia
Hibiscus	Althea frutex, or Sy- rian mallow	Monadelphia, Polyandria
Hieracium	Hawkweed	Syngenesia, Polyg. æqu.
Hillia		Hexandria, Monogynia
Hippia		Syngenesia, Polyg. Necefs.
Hippocratea		Triandria Monogynia
Hippocrepis	Horsehoe vetch	Diadelphia, Decandria

Hip-

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GENERA.	ENGLISH NAMES	CLASSES and ORDERS.
Hippomane	Manchineel	Monoecia, Monadelphina
Hippophae	Bastard Rhamnus, or sea buckthorn	Dioccia, Tetrandria
Hippuris		Monandria, Monogynia
Hiraea		Decandria, Trigynia
Hirtella		Pentandria, Monogynia
Holcus	Indian millet	Polygamia, Monoccia
Holosteum		Triandria, Trigynia
Hopea		Polyadelphia, Polyandria
Hordeum	Barley	Triandria, Digynia
Horminum	Pyrenean clary	Didynamia, Gymnosperm.
Hottonia	Water milfoil, or water violet	Pentandria, Monogynia
Houstonia		Tetrandria, Monogynia
Houtuynia		Polyandria, Polygynia
Hugonia		Monadelphia, Decandria
Humulus	Hop	Dioccia, Pentandria
Hudsonia		Dodecandria, Monogynia
Hura	Sandbox tree	Monoecia, Monadelphina
Hyacinthus	Hyacinth	Hexandria, Monogynia
Hydnum		Cryptogamia, Fungi
Hydrangea		Decandria, Digynia
Hydrastis	Yellow root	Polyandria, Polygynia
Hydrocharis	Frog's-bit	Dioccia, Enneandria
Hydrocotyle	Water Navelwort	Pentandria, Digynia
Hydrolea		Pentandria, Digynia
Hydrophyllum	Water leaf	Pentandria, Monogynia
Hymenaea	Locust tree, or courbaril	Decandria, Monogynia
Hyobanche		Didynamia, Angiosperm.
Hyoscyamus	Henbane	Pentandria, Monogynia
Hyosaris		Syngenesia, Polyg. æqu.
Hypocoum		Tetrandria, Digynia
Hypericum	St John's-wort	Polyadelphia, Polyandria
Hypnum		Cryptogamia, Musci
Hypochaeris		Syngenesia, Polyg. æqu.
Hypoxis		Hexandria Monogynia
Hyssopus	Hyssop	Didynamia, Gymnosperm.
F		
Jambolifera		Octandria, Monogynia

Ja.

GENERAL ENGLISH NAMES. CLASSES and ORDERS.

Jaquinia		Pentandria, Monogynia
Jasione	Scabious, with rampant heads, or sheep scabious	Syngenesia, Monogamia
Jasminum	Jasmine	Diandria, Monogynia
Jatropha	Cassava	Monœcia, Monadelphia
Iberis	Candy tuft, or Sciatricress	Tetradynamia, Siliculo.
Ignatia		Pentandria, Monogynia
Ilex	Holly	Tetrandria, Tetragynia
Illecebrum	Mountain knot grass	Pentandria, Monogynia
Illicium		Polyandria, Polygynia
Impatiens	Baifam, or female balsamine.	Syngenesia, Monogamia
Imperatoria	Masterwort	Pentandria, Digynia
Indigofera	Indigo	Diadelphia, Decandria
Inocarpus		Decandria, Monogynia
Inula	Elecampane	Syngenesia, Polyg. super.
Ipomoea	Quamoclit	Pentandria, Monogynia
Irefine		Dioecia, Pentandria
Iris	Flower de Luce	Triandria, Monogynia
Ifatis	Woad	Tetradynamia, Siliquosa
Ischæmum		Polygamia, Monoecia
Isnardia		Tetrandria, Monogynia
Isoetès		Cryptogamia, Filices
Isopyrum		Polyandria, Polygynia
Itea		Pentandria, Monogynia
Iva	Jesuits bark tree	Monoecia, Pentandria
Juglans	Walnut	Monoecia, Polyandria
Juncus	Rush	Hexandria, Monogynia
Jungermannia		Cryptogamia, Algæ
Juniperus	Juniper	Dioecia, Monadelphia
Jussieua		Decandria, Monogynia
Justicia	Malabar nut	Diandria, Monogynia
Ixia		Triandria, Monogynia
Ixora		Tetrandria, Monogynia

K

Kaempferia		Monandria, Monogynia
Kalmia	Dwarf laurel of Amer.	Decandria Monogynia
Kiggelaria		Dioecia, Decandria

Klein-

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Kleinbozia		Gynandria, Decandria
Knautia		Tetrandria, Monogynia
Knoxia		Tetrandria, Monogynia
Kœlreuteria		Ostandria, Monogynia
Kœnigia		Triandria, Trigynia
Kuhnia		Pentandria, Monogynia
Kyllingia		Triandria, Monogynia
L		
Lachenalia		Hexandria, Monogynia
Lachnæa		Ostandria, Monogynia
Lactuca	Lettuce	Syngenesia, Polyg. æqu.
Lætia		Polyandria, Monogynia
Lagerstroemia		Polyandria, Monogynia
Lagoecia	Wild, or bastard Cumin	Pentandria, Monogynia
Lagurus	Hare's tail grass	Triandria, Digynia
Lamium	Dead nettle, or Arch-angel	Didynamia, Gymnosperm.
Lanaria		Hexandria, Monogynia
Lantana	American Viburnum	Didynamia, Angiosperm.
Lapsana	Nipplewort	Syngenesia, Polyg. æqu.
Lasferpitium	Lasferwort	Pentandria, Digynia
Lathræa		Didynamia, Angiosperm.
Lathyrus	Chickling vetch	Diadelphia, Decandria
Lavandula	Lavender	Didynamia, Angiosperm.
Lavatera		Monadelphia, Polyandria
Laugieria		Pentandria, Monogynia
Laurus	Bay	Enneandria, Monogynia
Lawsonia		Ostandria, Monogynia
Leea		Pentandria, Monogynia
Lechea		Triandria, Trigynia
Lecythis		Polyandria, Monogynia
Ledum	Marsh Cistus, or wild Rosemary	Decandria, Monogynia
Lemna	Duck meat	Monoecia, Diandria
Leontice	Lion's leaf	Hexandria, Monogynia
Leontodon	Dandelion	Syngenesia, Polyg. æqu.
Leonurus	Lion's tail	Didynamia, Gymnosperm.
Lepidium	Dittander, or pepperwort	Tetradynamia, Silicul.
Lerchea		Monadelphia, Pentandria

Lcu-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS
<i>Leucojum</i>	Greater Snow drop	Hexandria, Monogynia
<i>Leysera</i>		Syngenesia, Polyg. super.
<i>Lichen</i>	Liverwort	Cryptogamia, Algae
<i>Licuala</i>		Hexandria, Monogynia
<i>Lightfootia</i>		Pentandria, Monogynia
<i>Lignosticum</i>	Lovage	Pentandria, Digynia
<i>Lignstrum</i>	Privet	Diandria, Monogynia
<i>Lilium</i>	Lily	Hexandria, Monogynia
<i>Limeum</i>		Heptandria, Digynia
<i>Limodorum</i>		Gynandria, Diandria
<i>Limonia</i>		Decandria, Monogynia
<i>Limosella</i>	Least water plantain	Didynamia, Angiosper.
<i>Linconia</i>		Pentandria, Digynia
<i>Lindera</i>		Hexandria, Monogynia
<i>Lindernia</i>		Didynamia, Angiosper.
<i>Linum</i>	Flax	Pentandria, Pentagynia
<i>Linnæa</i>		Didynamia, Angiosper.
<i>Liparia</i>		Diadelphia, Decandria
<i>Lippia</i>		Didynamia, Angiosper.
<i>Liquidambar</i>	Sweet gum	Monoecia, Polyandria
<i>Liriodendrum</i>	Tulip tree	Polyandria Polygynia
<i>Lisanthus</i>		Pentandria, Monogynia
<i>Lithospermum</i>	Gromwell	Pentandria, Monogynia
<i>Littorella</i>		Monoecia, Tetrandria
<i>Lobelia</i>	Cardinal flower	Syngenesia, Monogamia
<i>Loeflingia</i>		Triandria, Monogynia
<i>Loefelia</i>		Didynamia, Angiosper.
<i>Lolium</i>	Darnel	Triandria, Digynia
<i>Lonchitis</i>	Rough Spleenwort	Cryptogamia Filices
<i>Lonicera</i>	Honeysuckle	Pentandria, Monogynia
<i>Loofa</i>		Polyandria, Polygynia
<i>Loranthus</i>		Hexandria, Monogynia
<i>Lotus</i>	Bird's-foot Trefoil	Diadelphia, Decandria
<i>Ludwigia</i>		Tetrandria, Monogynia
<i>Lunaria</i>	Moonwort, Sattin flow- er, or Honesty	Tetradynamia, Siliculo,
<i>Lupinus</i>	Lupine	Diadelphia, Decandria
<i>Lychnis</i>	Campion	Decandria, Pentagynia
<i>Lycium</i>	Box Thorn	Pentandria, Monogynia
<i>Lycoperdon</i>	Puff-ball	Cryptogamia, Fungi
<i>Lycopodium</i>	Club moss	Cryptogamia, Musci

Lycopsis

TABLE I.

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Lycopsis		Pentandria, Monogynia
Lycopus	Water Horehound	Decandria, Monogynia
Lygeum	Hooded Matweed	Triandria, Monogynia
Lythimachia	Loosestrife	Pentandria, Monogynia
Lythrum	Willow Herb, or Purple Loosestrife	Dodecandria, Monogynia
M		
Maba		Dioecia, Diandria
Macrocnemum		Pentandria, Monogynia
Magaritaria		Dioecia, Octandria
Magnolia	Laurel-leaved Tulip Tree	Polyandria, Polygynia
Mahernia		Pentandria, Pentagynia
Malachra		Monadelphia, Polyandria
Malope	Bastard Mallow	Monadelphia, Polyandria
Malphigia	Barbadoes Cherry	Decandria, Trigynia
Malva	Mallow	Monadelphia, Polyandria
Mammea	Mammee	Polyandria, Monogynia
Mangifera	Mango Tree	Pentandria, Monogynia
Manisuris		Polygynia, Monoecia
Mannettia		Tetrandria, Monogynia.
Manulea		Didynamia, Angiosp.
Maranta	Indian Arrow Root	Monandria Monogynia
Maregravia		Polyandria, Polygynia
Marchantia		Cryptogamia, Algæ
Marrubium	Horehound	Didynamia, Gymnosp.
Marsilea		Cryptogymia, Filices
Martynia		Didynamia, Angiosper.
Maffonia		Hexandria, Monogynia
Matricaria	Feverfew	Syngenesia Polyg. super.
Matthiola		Pentandria, Monog.
Mauritia		Palmae
Medeola	Climbing African Asparagus	Hexandria, Trigynia
Medicago	Snail and moon Trefoil	Diadelphia, Decandria
Melaleuca		Polyadelphia, Polyandria
Melampodi-um		Syngenesia, Polyg. neces.
Melampyrum	Cow wheat	Didynamia, Angiosper.
Melanthium		Hexandria, Trigynia
	C c	Melastoma

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Melaetoma	American Gooseberry	Decandria, Monogynia
Melia	Bead Tree	Decandria, Monogynia
Melianthus	Honey-flower	Didynamia, Angiosper.
Melica		Triandria, Digynia
Melicocca		Octandria, Monogynia
Melissa	Baulm	Didynamia, Gymnosper.
Melittis	Baulm-leaved Archangel, or Bastard Baulm	Didynamia, Gymnosper.
Melochia		Monadelphia, Pentandria
Melodinus		Pentandria, Digynia
Melothria	Small creeping Cucumber	Triandria, Digynia
Memecylon		Octandria, Monogynia
Menaïs		Pentandria, Monogynia
Menispermum	Moonseed	Dioecia, Dodecandria
Mentha	Mint	Didynamia, Gymnosper.
Mentzelia		Polyandria, Monogynia
Menyanthes	Bogbean, or Marsh Trefoil	Pentandria, Monogynia
Mercurialis	Mercury	Diocia Enneandria
Mesembryanthemum	Fig Marigold	Icosandria, Pentagynia
Mespilus	Medlar	Icosandria, Pentagynia
Messerschmidia		Pentandria, Monogynia
Mesua	Indian Rose Chesnut	Monadelphia, Polyandria
Michauxia		Octandria, Monogynia
Michelia		Polyandria, Polygynia
Micropus	Bastard Cudweed	Syngenesia, Polyg. neces.
Milium	Millet	Triandria, Digynia
Milleria		Syngenesia, Polyg. neces.
Millingtonia		Didynamia, Angiosper.
Mimosa	Sensitive Plant	Polygamia, Monocia
Mimulus		Didynamia, Angiosper.
Mimusops		Octandria, Monogynia
Minuartia		Triandria, Trigynia
Mirabilis	Marvel of Peru	Pentandria, Monogynia
Mitchella		Tetrandria, Monogynia
Mitella	Bastard Amer. Sanicle	Decandria, Digynia
Mnium		Cryptogamia, Musci
Mœhringia	Mountain Chickweed	Octandria, Digynia
Mollugo		Triandria, Trigynia
Molucella	Molucca Baulm	Didynamia, Gymnosper. Momordica

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Momordica	Male Balsam Apple	Monoecia, Syngenesia
Monarda	Oswego tea	Diandria, Monogynia
Monetia		Tetrandria, Monogynia
Monnieria		Diadelphia, Pentandria
Monotropa		Decandria, Monogynia
Monsonia		Polyadelphia, Dodecand.
Montia		Triandria, Trigynia
Montinia		Dioecia, Tetrandria
Moræa		Triandria, Monogynia
Morina		Diandria, Monogynia
Morinda		Pentandria, Monogynia
Morisonia		Polyandria, Monogynia
Morus	Mulberry Tree	Monoecia, Tetrandria
Mucor		Cryptogamia, Fungi
Miillera		Diadelphia, Decandria
Munchhausia		Polyadelphia, Polyandria
Muntingia		Polyandria, Monogynia
Murraya		Decandria, Monogynia
Musa	Plantain Tree	Polyandria, Monoecia
Mussaenda		Pentandria, Monogynia
Myagrum	Gold of Pleasure	Tetradynamia, Siliquos.
Myginda		Tetrandria, Tetragynia
Myosotis	Moufe-ear scorpion-grafs	Pentandria, Monogynia
Myosurus	Moufe-tail	Pentandria, Polygynia
Myrica	Candleberry Myrtle, Gale, or sweet Willow	Dioecia, Tetrandria
Myriophyllum	Water Milfoil	Monoecia, Polyandria
Myristica		Dioecia, Monadelphia
Myrosma		Monandria, Monogynia
Myroxylon		Decandria, Monogynia
Myrsine	African Box	Pentandria, Monogynia
Myrtus	Myrtle	Icosandria, Monogynia
N		
Najas		Dioecia, Monandria
Nama		Pentandria, Digynia
Nandina		Hexandria, Monogynia
Napæa		Dioecia, Monadelphia
Narcissus	Daffodi	Hexandria, Monogynia
	C c 2	Nardus

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Nardus		Triandria, Monogynia
Nauclea		Pentandria, Monogynia
Nepenthes		Gynandria, Tetrandria
Nepeta	Catmint, or Nep	Didynamia, Gymnosperm.
Nephelium		Monoecia, Pentandria
Nerium	Oleander, or Rose-bay	Pentandria, Monogynia
Neurada		Decandria, Decagynia
Nicotiana	Tobacco	Pentandria, Monogynia
Nigella	Fennel-flower, or de- vil in a bush	Polyandria, Pentagynia
Nigrina		Pentandria, Monogynia
Nipa		Monoecia, Monandria
Nissolia		Diadelphia, Decandria
Nitraria		Dodecandria, Monogynia
Nolana		Pentandria, Monogynia
Nyctanthes	Arabian Jasmine	Diandria, Monogynia
Nymphæa	Water Lilly	Polyandria, Monogynia
Nyssa	Tulepo Tree	Polygamia, Dioecia
O		
Obolaria		Didynamia, Angiosperm.
Ochna		Polyandria, Monogynia
Ocimum	Basil	Didynamia, Gymnosperm.
Oedera		Syngenesia, Polyg. Segre.
Oenanthe	Water Dropwort	Pentandria, Digynia
Oenothera	Tree Primrose	Octandria, Monogynia
Olex		Triandria, Monogynia
Oldenlandia		Tetrandria, Monogynia,
Olea	Olive	Diandria, Monogynia
Olyra		Monoecia, Triandria,
Omphalea		Monoecia, Triandria
Opoclea		Cryptogamia, Filices
Ononis	Rest Harrow, or Cam- mock, or Petty Whin	Diadelphia, Decandria
Onopordum	Woolly Thistle	Syngenesia, Polyg. æqu.
Onosma		Pentandria, Monogynia
Ophioglossum		Cryptogamia, Filices
Ophiorrhiza	Adder's tongue	Pentandria, Monogynia
Ophioxylon		Polygamia, Monoecia
Ophira		Octandria, Monogynia
Ophrys	Twayblade	Gynandria Diandria
Orchis		Gynandria, Diandria
		Origanum

GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Origanum	Wild Marjoram	Didynamia, Gymnosp.
Orixa		Tetrandria, Monogynia
Ornithogalum	Star of Bethlem	Hexandria, Monogynia
Ornithopus	Bird's foot	Diadelphia, Decandria
Orobanche	Broom rape	Didynamia, Angiosper.
Orobis	Bitter Vetch	Diadelphia, Decandria
Orontium	Floating Arum	Hexandria, Monogynia
Ortegia		Triandria, Monogynia
Oryza	Rice	Hexandria, Digynia
Osbeckia		Ostandria, Monogynia
Osmites		Syngenesia, Polyg. frust.
Osmunda	Osmund royal, or flow- ering Fern	Cryptogamia, Filices
Osteospermum	Hard-seeded Chrysan- themum	Syngenesia, Polyg. nocc.
Osyris	Poet's Cassia	Dioecia, Triandria
Othera		Tetrandria, Monogynia
Othonna	African Ragwort	Syngenesia, Polyg. nocc.
Ovieda		Didynamia, Angiosper.
Oxalis	Wood Sorrel	Decandria, Pentagynia

P

Paederota		Diandria, Monogynia
Paederia		Pentandria, Monogynia
Pæonia	Pæony	Polyandria, Digynia
Pallasia		Dodecandria, Trigynia
Panax	Ginseng	Polygamia, Dioecia
Pancratium	Sea Daffodil	Hexandria Monogynia
Panicum	Panic Grass	Triandria, Digynia
Papaver	Poppy	Polyandria, Monogynia
Parietaria	Pellitory	Polygynia, Monoecia
Paris	True love, or one Berry	Ostandria, Tetragynia
Parkinsonia		Decandria, Monogynia
Parnassia	Grass of Parnassus	Pentandria, Tetragynia
Parthenium	Bastard Feverfew	Monoecia, Pentandria
Paspalum		Triandria, Digynia
Passerina	Sparrow-wort	Ostandria, Monogynia
Passiflora	Passion flower	Cynandria, Pentandria
Pastinaca	Parfneep	Pentandria, Digynia
Patagonula		Pentandria, Monogynia
Pavetta		Tetrandria, Monogynia
Paullinia		Ostandria, Trigynia

Pectis

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Pectis		Syngenesia, Polyg. supe.
Pedaliu		Didynamia, Angiosper.
Pedicularis	Rattle coxcomb, or Lousewort	Didynamia, Angiosper.
Peganum	Wild Syrian rue	Dodecandria, Monogynia
Pelargonium		Monadelphia Heptandria
Peltaria		Tetradynamia, Siliculo.
Penæa		Tetrandria, Monogynia
Pentapetes		Monadelphia, Dodecan.
Penthorum		Decandria; Pentagynia
Pentstemon		Didynamia Angiospermia
Peplis	Water purslane	Hexandria, Monogynia
Perdicium		Syngenesia, Polyg. super.
Pergularia		Pentandria, Monogynia
Perilla		Didynamia, Gymnosper.
Periploca	Virginian silk	Pentandria, Digynia
Perotis		Triandria, Digynia
Petesia		Tetrandria, Monogynia
Petiveria	Guinea-hen weed	Hexandria, Tetragynia
Petrea		Didynamia, Angiosper.
Peucedanum	Hog's Fennel, or Sul- phurwort	Pentandria, Digynia
Peziza	Cup Mushroom	Cryptogamia, Fungi
Phaca	Bastard Milk vetch	Diadelphia, Decandria
Phalaris	Canary grass	Triandria, Digynia
Phallus	Stinkhorns	Cryptogamia, Fungi
Pharnaceum		Pentandria, Trigynia
Pharus		Monoecia, Hexandria
Phascum		Cryptogamia, Musci
Phaseolus	Kidney-bean	Diadelphia, Decandria
Phellandrium		Pentandria, Digynia
Philadelphus	Mock Orange, com- monly called Syringa	Icosandria, Monogynia
Phillyrea	Mock privet	Diandria, Monogynia
Phleum	Cat's tail	Triandria, Digynia
Phlomis	Sage tree, or Jerusa- lem sage	Didynamia, Gymnosper.
Phlox	Lychnidea, or Bastard lychnis	Pentandria, Monogynia
Phoenix	Common palm, or date tree	Palmæ
Phryma		Didynamia, Gymnosper.
Phylica	Bastard Alaternus	Pentandria, Monogynia
		Phyllanthus

GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Phyllanthus	Sea-side laurel	Monoecia, Triandria
Phyllanche		Monoecia, Monandria
Phyllis	Bastard hare's ear	Pentandria, Digynia
Phytalis	Alkekengi, or Winter cherry	Pentandria, Monogynia
Phyteuma	Rampions	Pentandria, Monogynia
Phytolacca	American nightshade	Decandria, Decagynia
Picris		Syngenesia, Polyg. aqu.
Pilularia	Pepper-grass	Cryptogamia, Filices
Pimpinella	Burnet saxifrage	Pentandria, Digynia
Pinguicula	Butterwort	Diandria, Monogynia
Pinus	Pine tree	Monoecia, Monadelphina
Piper	Pepper	Diandria, Trigynia
Piscidia		Diadelphia, Decandria
Pisonia	Fingrigo	Polygamia, Dioecia
Pistacia	Pistacia nut	Dioecia, Pentandria
Pistia		Gynandria, Hexandria
Pisum	Pea	Diadelphia, Decandria
Pitcairnia		Hexandria, Monogynia
Pittosporum		Pentandria, Monogynia
Plantago	Plantain	Tetrandria, Monogynia
Platanus	Plane tree	Monoecia, Polyandria
Plectranthus		Didynamia, Gymnosper.
Plectronia		Pentandria, Monogynia
Plinia		Polyandria, Monogynia
Plocama		Pentandria, Monogynia
Plukenetia		Monoecia, Monadelphina
Plumbago	Leadwort	Pentandria, Monogynia
Plumeria	Red jasmine	Pentandria, Monogynia
Poa		Triandria, Digynia
Podophyllum	Duck's-foot, or May apple	Polyandria, Monogynia
Poinciana	Barbadoes flowerfence, or Spanish carnations	Decandria, Monogynia
Polemonium	Greek Valerian, or Jacob's Ladder	Pentandria, Monogynia
Polianthes	Tuberose	Hexandria, Monogynia
Pollia		Hexandria, Monogynia
Pollichia		Monandria, Monogynia
Polycarpon		Triandria, Trigynia
Polycnemum		Triandria, Monogynia
Polygala	Milkwort	Diadelphia, Octandria
Polygonum	Knot-grass	Octandria, Trigynia
Polymnia		Syngenesia, Polyg. neces. Polypodium

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Polypodium	Polypody	Cryptogamia Filices
Polypremum	Carolina flax	Tetrandria, Monogynia
Polytrichum	Golden maidenhair	Cryptogamia, Musci
Pommereulla		Triandria, Monogynia
Pontederia		Hexandria, Monogynia
Populus	Poplar	Dioecia, Octandria
Porana		Pentandria, Digynia
Porcella		Cryptogamia, Musci
Portlandia		Pentandria, Monogynia
Portulaca	Purslane	Dodecandria, Monogynia
Portulacaria		Pentandria, Trigynia
Potamogeton	Pondweed	Tetrandria, Tetragynia
Potentilla	Cinquefoil	Icosandria Polygynia
Poterium	Garden Burnet	Monoecia, Polyandria
Pothos		Gynandria, Polyandria
Prasium	Shrubby hedge nettle	Didynamia, Gymnosperm.
Premna		Didynamia, Angiosperm.
Prenanthes	Wild lettuce	Syngenesia, Polyg. æqu.
Primula	Primrose	Pentandria, Monogynia
Prinos	Winter berry	Hexandria, Monogynia
Prockia		Polyandria, Monogynia
Proserpinaca		Triandria, Trigynia
Profopis		Decandria, Monogynia
Protea	Silver tree	Tetrandria, Monogynia
Prunella	Self heal	Didynamia, Gymnosperm.
Prunus	Plumb tree	Icosandria Monogynia
Psidium	Guayava, or bay plumb	Icosandria, Monogynia
Pforalea		Diadelphia, Decandria
Psychotria		Pentandria, Monogynia
Ptelea	Shrub trefoil	Tetrandria, Monogynia
Pteris	Brakes, or female fern	Cryptogamia, Filices
Pterocarpus		Diadelphia, Decandria
Pteronia		Syngenesia, Polyg. æqu.
Pulmonaria	Lungwort	Pentandria, Monogynia
Punica	Pomgranate	Icosandria, Monogynia
Pyrola	Winter green	Decandria, Monogynia
Pyrus	Pear	Icosandria, Pentagynia
Q		
Quaffia		Decandria, Monogynia
Quercus	Oak	Monoecia, Polyandria,
Queria		Tetrandria, Trigynia
Quisqualis		Decandria, Monogynia

TABLE I.

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

R

Rajania		Dioecia, Hexandria,
Randia		Pentandria, Monogynia
Ranunculus	Crowfoot	Polyandria, Polygynia
Raphanus	Radish	Tetradynamia, Siliquos.
Rauvolfia		Pentandria, Monogynia
Reaumuria		Polyandria, Pentagynia
Relbunium		Syngenesia, Polyg. super.
Renealmia		Monandria, Monogynia
Reseda	Safford rocket	Dodecandria, Trigynia
Restio		Dioecia, Diandria
Retzia		Pentandria, Monogynia
Rhacoma		Tetrandria, Monogynia
Rhamnus	Buckthorn	Pentandria, Monogynia
Rheedia		Polyandria, Monogynia
Rheum	Rhubarb	Enneandria, Trigynia
Rhexia		Octandria, Monogynia
Rhinanthus	Elephant's head	Didynamia, Angiosper.
Rhizophora	Candle of the Indians	Dodecandria, Monogynia
Rhodiola	Rose-root	Dioecia, Octandria
Rhododendron	Dwarf rosebay	Decandria, Monogynia
Rhodora		Decandria, Monogynia
Rhus	Sumach	Pentandria, Trigynia
Ribes	Currant tree	Pentandria, Monogynia
Riccia	Marsh Liverwort	Cryptogamia, Algæ
Richardia		Hexandria, Monogynia
Ricinus	Palma Christi	Monoecia, Monadelphica
Ricotia		Tetradynamia, Siliquosa
Rivina		Tetrandria, Monogynia
Robinia	False Acacia	Diadelphia, Decandria
Roella		Pentandria, Monogynia
Rondeletia		Pentandria, Monogynia
Roridula		Pentandria, Monogynia
Rosa	Rose	Icosandria, Polygynia
Rosmarinus	Rosemary	Diandria, Monogynia
Rotala		Triandria, Monogynia
Rottbolla		Triandria, Digynia
Royena	African bladder-nut	Decandria, Digynia
Rubia	Madder	Tetrandria, Monogynia
Rubus	Raspberry	Icosandria, Polygynia

D d

Rud-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Rudbeckia	Dwarf sunflower	Syngenesia, Polyg. frust.
Ruellia		Didynamia, Angiosper.
Rumex	Dock	Hexandria, Trigynia
Rumphia		Triandria, Monogynia
Ruppia		Tetrandria, Tetragynia
Ruscus	Knee holly, or butcher's broom	Dioecia, Syngenesia
Ruta	Rue	Decandria, Monogynia
S		
Saccharum	Sugar cane	Triandria, Digynia
Sagina		Tetrandria, Tetragynia
Sagittaria	Arrow head	Monoccia, Polyandria
Salacia		Gynandria, Triandria
Salicornia	Jointed Glass-wort, or salt-wort	Monandria, Monogynia
Salix	Willow	Dioecia, Diandria,
Salifolia	Glass-wort	Pentandria, Digynia
Salvadora		Tetrandria, Tetragynia
Salvia	Sage	Diandria, Monogynia
Samara		Tetrandria, Monogynia
Sambucus	Elder	Pentandria, Trigynia
Samolus	Round leaved water pimpernel	Pentandria, Monogynia
Samyda		Decandria, Monogynia
Sanguinaria	Puccoon	Polyandria, Monogynia
Sanguisorba	Greater wild burnet	Tetrandria, Monogynia
Sanicula	Sanicle	Pentandria, Digynia
Santalum	Saunders	Ostendria, Monogynia
Santolina	Lavender cotton	Syngenesia Polyg. aqu.
Sapindus	Soap-berry	Ostendria, Trigynia
Saponaria	Soap-wort	Decandria, Digynia
Saraca		Diadelphia, Hexandria
Sarothra	Bastard gentian	Pentandria, Trigynia,
Sarracenia	Sidefaddle flower	Polyandria, Monogynia
Satureja	Savory	Didynamia, Gymnosf.
Satyrium		Gynandria, Diandria
Saururus	Lizard's tail	Heptandria, Trigynia
Sauvagesia		Pentandria, Monogynia
Saxifraga	Saxifrage	Decandria, Digynia
Scabiosa	Scabious	Tetrandria, Monogynia
		Scabrita

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Scabrita		Tetrandria Monogynia
Scaevola		Pentandria, Monogynia
Scandix	Shepherd's needle, or Venus's comb	Pentandria, Digynia
Scheuchzeria	Lesser flowering rush	Hexandria, Trigynia
Schinus	Indian mastick	Dioecia, Decandria,
Schmidelia		Octandria, Digynia
Schoenus		Triandria, Monogynia
Schotia		Decandria, Monogynia
Sehrebera		Pentandria, Digynia
Schualbea		Didynamia, Angiosper.
Schwenkia		Diandria, Monogynia
Scilla	Squill	Hexandria, Monogynia
Scirpus	Rush grass	Triandria, Monogynia
Scleranthus	German knot-grass, or knawel	Decandria, Digynia
Sclerocarpus		Syngenesia, Polyg. frust.
Scolymus	Golden thistle	Syngenesia, Polyg. æqu.
Scoparia		Tetrandria, Monogynia
Scorpiurus	Caterpillars	Diadelphia, Decandria
Scorzonera	Viper's grass	Syngenesia, Polyg. æqu.
Scrophularia	Figwort	Didynamia, Angiosper.
Scutellaria	Scull-cap	Didynamia, Gymnosper.
Secale	Rye	Triandria, Digynia
Securidaca		Diadelphia, Octandria
Sedum	Lesser Houseleek	Decandria, Pentagynia,
Seguieria		Polyandria, Monogynia
Selago		Didynamia, Angiosper.
Selinum	Milk parsley	Pentandria, Digynia
Semecarpus		Pentandria, Trigynia
Sempervivum	Houseleek	Dodecandria, Dodeca-
		gynia
Senecio	Groundsel	Syngenesia, Polyg. supe.
Septas		Heptandria, Heptagynia
Serapias	Helleborine, or bastard Hellebore	Gynandria, Diandria
Seriola		Syngenesia, Polyg. æqu.
Seriphium		Syngenesia, Monogamia
Serpicula		Monoecia, Tetrandria
Serratula	Saw-wort	Syngenesia, Polyg. æqu.
Sesamum	Oily purging grain	Didynamia, Angiosper.
	D d 2	Seseli

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS
Sefeli	Hartwort of Marfeilles	Pentandria, Digynia
Sesuvium		Icosandria, Trigynia
Sheffieldia		Pentandria, Monogynia
Sherardia	Little field madder	Tetrandria, Monogynia
Sibbaldia		Pentandria, Pentagynia
Sibthorpia		Didynamia, Angiosper.
Sicyos	Single-seeded cucum- ber	Monoecia, Syngenesia
Sida	Indian mallow	Monadelphia, Polyandria
Sideritis	Ironwort	Didynamia, Gymnosper.
Sideroxylon	Ironwood	Pentandria, Monogynia
Sigesbeckia		Syngenesia, Polyg. super.
Silene	Viscous campion	Decandria, Trigynia
Silphium	Bastard chrysanthe- mum	Syngenesia, Polyg. ne- cessaria
Sinapis	Mustard	Tetradynamia, Siliquos.
Siphonanthus		Tetrandria, Monogynia
Sirium		Tetrandria, Monogynia
Sison	Bastard stone parsley	Pentandria, Digynia
Sisymbrium	Water cresses	Tetradynamia, Siliquosa
Sisyrinchium	Bermudiana	Gynandria, Triandria
Sium	Water parsnep	Pentandria, Digynia
Skimmia		Tetrandria, Monogynia
Sloanea	Apeiba of the Brasili- aris	Polyandria, Monogynia
Smilax	Rough bindweed	Dioecia, Hexandria
Smithia		Diadelphia, Decandria,
Smyrnum	Alexanders	Pentandria, Digynia
Solandra		Pentandria, Monogynia
Solanum	Nightshade	Pentandria, Monogynia
Soldanella	Soldanel	Pentandria, Monogynia
Solidago	Golden rod	Syngenesia, Polyg. supe.
Sonchus	Sow thistle	Syngenesia, Polyg. æqu.
Sophora		Decandria, Monogynia
Sorbus	Service tree	Icosandria, Trigynia
Sparganium	Burr reed	Monoecia, Triandria
Sparmannia		Polyandria, Monogynia
Spartium	Broom	Diadelphia, Decandria
Spathelia		Pentandria, Trigynia
Spergula	Spurrey	Decandria, Pentagynia
Spermacoe	Button-weed	Tetrandria, Monogynia
Sphæranthus	Globe flower	Syngenesia, Polyg. segre- gata
		Sphagnum

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Sphagnum	Bog-moss	Cryptogamia Musci
Spigelia	Worm grass	Pentandria, Monogynia
Spilanthus		Syngenesia, Polyg. æqu.
Spinacia	Spinach	Dioecia, Pentandria
Spinifex		Polygamia, Monoecia
Spiræa	Spiked willow of Theophrastus, or Spiræa Frutex	Icosandria, Pentagynia
Splachnum		Cryptogamia, Musci
Spondias	Brasilian Plum	Decandria, Pentagynia
Stachys	Safe horehound	Didynamia Gymnosperm.
Stæbelina		Syngenesia, Polyg. æqu.
Stapelia		Pentandria, Digynia
Staphylea	Bladder nut	Pentandria, Trigynia
Statice	Thrift, or Sea pink	Pentandria, Pentagynia
Stellaria	Great Chickweed	Decandria, Trigynia
Stellera	German groundsel, or Tragus's sparrow-wort	Octandria, Monogynia
Stemodia		Didynamia, Angiosperm.
Sterculia		Monoecia, Monadelphina
Steris		Pentandria, Digynia
Stewartia		Monadelphina, Polyandria
Stilbe		Polygamia, Dioecia
Stipa	Winged spike-grass	Triandria, Digynia
Stilago		Dioecia, Diandria
Stillingia		Monoecia, Monadelphina
Stoebe	Bastard Ethiopian Elychrysum	Syngenesia, Polyg. segregata
Stokesia		Syngenesia, Polyg. æqu.
Stratiotes	Water soldier	Polyandria, Hexagynia
Strelitzia		Pentandria, Monogynia
Strychnus		Pentandria, Monogynia
Strumpfia		Syngenesia, Monogamia
Struthiola		Tetrandria, Monogynia
Styrax	Storax tree	Dodecandria, Monogynia
Subularia	Rough-leaved Alysson	Tetradynamia Siliquosa
Surlana		Decandria, Pentagynia
Swertia		Pentandria, Digynia
Swietenia		Decandria Monogynia
Symphytum	Comphrey	Pentandria, Monogynia
Symplocos		Polyadelphia, Polyandria
Syringa	Lilac	Diandria, Monogynia
Symphonia		Monadelphina, Pentandria
		Taber-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
T		
Tabernaemontana		Pentandria Monogynia
Tacca		Dodecandria, Trigynia
Tagetes	African marygold	Syngenesia, Polyg. supe.
Tamarindus	Tamarind tree	Triandria, Monogynia
Tamarix	Tamarisk	Pentandria, Trigynia
Tamus	Black Bryony	Dioecia, Hexandria
Tanacetum	Tansy	Syngenesia, Polyg. sup.
Tarchonanthus	Shrubby African Flea-bane	Syngenesia, Polyg. æqu.
Targionia		Cryptogymia, Algæ
Taxus	Yew tree	Dioecia, Monadelphina
Telephium	True Orpine	Pentandria, Trigynia
Terminalia		Polygamia, Monoecia
Ternstroemia		Polyandria, Monogynia
Tetracera		Polyandria, Tetragynia
Tetragonia		Icolandria, Pentagynia
Teucrium	Germander	Didynamia Gymnosperm.
Thalia		Monandria Monogynia
Thalictrum	Meadow rue	Polyandria, Polygynia
Thapsia	Deadly carrot, or scorching fennel.	Pentandria, Digynia
Thea	Tea tree	Polyandria, Monogynia
Theligonum	Dog's cabbage	Monoecia, Polyandria
Theobroma	The chocolate nut	Polyadelphia, Pentandria
Theophrasta		Pentandria, Monogynia
Thesium		Pentandria, Monogynia
Thlaspi	Mithridate mustard, or treacle mustard	Tetradynamia, Siliculosa
Thouinia		Diandria, Monogynia,
Thrinax		Palmæ
Thryallis		Decandria, Monogynia
Thuja	Arbor vitæ	Monoecia, Monadelphia
Thunbergia		Didynamia, Angiosperm.
Thymbræ	Mountain hyssop	Didynamia, Gymnosperm.
Thymus	Thyme	Didynamia, Gymnosperm.
Tiarella		Decandria, Digynia
Tilia	Lime tree	Polyandria, Monogynia
Tillæa	Small annual houseleek	Tetrandria, Tetragynia
Tillandzia		Hexandria, Monogynia
		Tinus

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Tinus		Enneandria, Monogynia
Toluifera	Balsam of Tolu tree	Decandria, Monogynia
Tbmex		Tetrandria, Monogynia
Tordylium	Hartwort of Crete	Pentandria, Digynia
Torenia		Didynamia, Angiosper.
Tormentilla	Tormentil	Icosandria, Polygynia
Tournefortia		Pentandria, Monogynia
Tozzia		Didynamia, Angiosper.
Trachelium	Blue umbelliferous Throatwort	Pentandria, Monogynia
Tradescantia	Virginian spiderwort	Hexandria, Monogynia
Tragia		Monoecia Triandria
Tragopogon	Goat's beard	Syngenesia, Polyg. æqu.
Trapa	Water Caltrops	Tetrandria, Monogynia
Tremella		Cryptogamia, Algæ
Trewia		Polyandria, Monogynia
Trianthema	Horse purslane	Decandria, Digynia
Tribulus	Caltrops	Decandria, Monogynia
Trichilia		Decandria, Monogynia
Trichomanes		Cryptogamia, Filices
Trichosanthes	Serpent cucumber	Monoecia, Syngenesia
Trichostema		Didynamia, Gymnosp.
Tridax	Trailing starwort of Vera Cruz	Syngenesia, Polyg. super.
Trientalis	Winter green with chickweed flowers	Heptandria, Monogynia
Trifolium	Trefoil	Diadelphia, Decandria
Triglochia	Arrow headed grass	Hexandria, Trigynia
Trigonella	Fenugreek	Diadelphia, Decandria
Trillium	Three-leaved night- shade, or herb true- love of Canada	Hexandria, Trigynia
Trilix		Polyandria, Monogynia
Triopteris		Decandria, Trigynia
Triosteum	Fever root, Dr Tin- ker's weed, or false Ipecacuanã	Pentandria, Monogynia
Triplaris		Triandria, Trigynia
Tripsacum		Monoecia, Triandria
Triticum	Wheat	Triandria, Digynia
Triumfetta		Dodecandria, Monogynia
Trollius	Globe Ranunculus	Polyandria, Polygynia Tropæolum

GENERA.	ENGLISH NAMES.	CLASSES and CLASSES
<i>Tropaeolum</i>	Indian cress	Oestandria, Monogynia
<i>Trophis</i>		Dioecia, Tetrandria
<i>Tulbagia</i>		Hexandria, Monogynia
<i>Tulipa</i>	Tulip	Hexandria, Monogynia
<i>Turnera</i>		Pentandria, Trigynia
<i>Turraa</i>		Decandria, Monogynia
<i>Turritis</i>	Tower mustard	Tetradynamia, Siliquosa
<i>Tussilago</i>	Colt's foot	Syngenesia, Polyg. super.
<i>Typha</i>	Cat's tail, or reed-mace	Monoecia, Triandria

V

<i>Vaccinium</i>	Whortle Berry	Oestandria, Monogynia
<i>Vahlia</i>		Pentandria, Digynia
<i>Valantia</i>	Croffwort	Polygamia, Monoecia
<i>Valeriana</i>	Valerian	Triandria, Monogynia
<i>Vallisneria</i>		Dioecia, Diandria
<i>Vállea</i>		Polyandria, Monogynia
<i>Vandellia</i>		Didynamia, Angiosper.
<i>Varronia</i>		Pentandria, Monogynia
<i>Vateria</i>		Polyandria, Monogynia
<i>Vatica</i>		Dodecandria, Monogynia
<i>Velezia</i>		Hexandria, Digynia,
<i>Vella</i>	Spanish cress	Tetradynamia, Siliculosa
<i>Veratrum</i>	White hellebore	Polygamia, Monoecia
<i>Verbascum</i>	Mullein	Pentandria, Monogynia
<i>Verbena</i>	Verbain	Diandria, Monogynia
<i>Verbesina</i>		Syngenesia, Polyg. super.
<i>Veronica</i>	Speedwell	Diandria, Monogynia
<i>Viburnum</i>	Pliant mealy tree, or wayfaring tree	Pentandria, Trigynia
<i>Vicia</i>	Vetch	Diadelphia, Decandria
<i>Vinca</i>	Periwinkle	Pentandria, Monogynia
<i>Viola</i>	Violet	Syngenesia, Monogamia
<i>Virecta</i>		Pentandria, Monogynia
<i>Viscum</i>	Mistletoe	Dioecia, Tetrandria
<i>Visnea</i>		Dodecandria, Trigynia
<i>Vitex</i>	Agnus Castus, or chaste tree	Didynamia, Angiosper.
<i>Vitis</i>	Vine	Pentandria, Monogynia

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

Ulex	Furz, whins, gorse, or scorpions thorn	Diadelphia, Decandria
Ulmus	Elm tree	Pentandria, Digynia
Ulva		Cryptogamia, Algæ
Uniola	Sea-side oats, of Caro- lina	Triandria, Digynia
Unxia		Syngenesia, Polyg. super.
Volkameria		Didynamia, Angiosper.
Urena	Indian mallow	Monadelphia, Polyandria
Urtica	Nettle	Monoecia, Tetrandria
Utricularia	Water milfoil	Decandria, Monogynia
Uvaria		Polyandria, Polygynia
Uvularia		Hexandria, Monogynia

W

Wachendorfia		Triandria, Monogynia
Waltheria		Monadelphia, Pentandria
Weigtea		Pentandria, Monogynia
Weinmannia		Octandria, Digynia
Willichia		Triandria, Monogynia
Wintera		Polyandria, Polygynia
Witheringia		Tetrandria, Monogynia
Wittsenia		Triandria Monogynia
Wurmbea		Hexandria, Trigynia

X

Xanthium	Lesser Burdock	Monoecia, Pentandria
Xeranthium	Austrian sneezewort, or eternal flower	Syngenesia, Polyg. super.
Ximenia		Octandria, Monogynia
Xylophylla		Pentandria, Trigynia
Xylopia		Gynandria, Polyandria
Xyris		Triandria, Monogynia

Y

Yucca	Adam's 'Needle	Hexandria, Monogynia
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Z

Zamia		Palmae
		Zanichellia

E c

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Zanichellia	Triple-headed pond-weed	Monoeceia, Monandria
Zanonia		Diœcia, Pentandria
Zanthoriza		Pentandria, Polygynia
Zanthoxylum	Tooth-ach tree	Dioœcia, Pentandria
Zea	Indian Turkey wheat	Monoeceia, Triandria
Zinnia		Syngenesia, Polyg. super.
Zizania		Monoeceia, Hexandria
Ziziphora	Syrian field basil	Diandria, Monogynia
Zoegaea		Syngenesia Polyg. Frustr.
Zostera	Grass-wrack	Gynandria, Polyandria
Zygophyllum	Bean caper	Decandria, Monogynia

TABLE

TABLE II.

GENERIC NAMES. REJECTED.	ENGLISH NAMES	LINNEAN GENERA.
A		
Abies, Tourn.	Fir	Pinus
Abrotanum, Tourt.	Southern wood	Artemisia
Absointhium, Tourn. & Vaill. A. G.	Wormwood	Artemisia
Abutilon, Dill. Elth. & Tourn.	Indian mallow	Sida
Abutilon, Dill. Elth.	Carolina mallow	Malva
Acacia, Tourn.		Mimosa
Acajou, Tourn.	Cashew nut	Anacardium
Acarna, Vaill. A. G.	Blessed thistle	Cnicus
Acetosa, Tourn.	Sorrel	Rumex
Achyraacantha, Dill. Elth.		Achyranthes
Achyronia, Royen.	African broom	Aspalathus
Achyrophorus Vaill. A. G.		Hypochoeris
Acinodendron, Lin. gen. pl. ed. prim.	American gooseberry	Melastoma
Acinos, Dill. gen.	Wild, or stone basil	Thymus
Acnide, Mitch.		Acnida
Adhatoda, Tourn.	Malabar nut	Justicia
Ægilops, Dill. gen.	Oat grass	Bromus
Ageratum, Tourn.		Erinus
Agnanthus, Vaill. A. G.		Cornutia
Agrimonoïdes, Tourn.	Bastard agrimony	Agrimonia
Ahouai, Tourn.		Cerbera
Alaternus, Tourn.	False Phyllyrea	Rhamnus
Alcea, Tourn.	Yervain mallow	Malva
Alchimilla, Tourn.	Ladies mantle	Alchemilla
Alga, Raj. Ang.	Grass-wrack	Zostera
Algoides, Vaill. A. G.		Zannichellia
Alhagi, Tourn.	French honeysuckle	Hedysarum
Alckengi, Tourn.	Winter cherry	Physalis
Alnus, Tourn.	Alder	Betula
Aloides, Boer. Lugd.	Water foldiet	Stratiotes
Alpina, Plum.		Alpinia
Alfinastrum, Vaill. B. P.		Elatine

GENERIC NAMES REJECTED.	ENGLISH NAMES	LINNÆAN GENERA.
Alfene, Tourn.	Great chickweed	Stellaria
Afinella, Dill. gen.		Sagina
Afinoides, Raj.		Bufonia
Alfinoides, Vaill. B. P.		Montia
Alypum, Niss. A. G.	Blue daisy	Globularia
Alyfoides, Tourn.	Madwort	Alyssum
Amantia, Dill.	Agaric	Agaricus
Amaranthi species, Tourn.		Amaranthus
Amaranthoides, Tourn.	Globe Amaranth	Gomphrena
Amberboi, Vaill.	Sweet oriental cyamus, called sweet fultan.	Centaurea
Amethysina, Amman, & Hall.		Amethysten
Ammoides, Boerh.	Bishop's weed	Ammi
Ampana, Hort. Mal.	Malabar Palm (male)	Borassus
Anacamperos, Tourn.	Orpine	Sedum
Anacamperos, Lin. gen. pl. edit. prim.	Evergreen African pur- flane	Portulaca
Anagallidistrum, Mich.		Centunculus
Ananas, Tourn.	Pine apple	Bromelia
Ananthocyclos, Vaill. A. G. & Dill. Etb.		Cotula
Anapodophyllum, Tourn.	Duck's foot, or May apple	Podophyllum
Androsænum, Tourn.	Tutsan, or park leaves	Hypericum
Anemone ranunculus, Dill. gen.	Wind flower	Anemone
Anemonoides, Dill. gen. & Vaill. A. G.	Wood anemone	Anemone
Anemonospermus, Com. Hort. Amst.		Arctotis
Angiopteris, Mitch.		Onoclea
Anguina, Trew	Water dragons	Calla
Anguina, Mich.	Serpent cucumber	Trichosanthes
Anguria, Tourn.	Water melon	Cucurbita
Anonis, Tourn.	Restharrow	Ononis
Anonyhos, Gron. Virg.		Chelone
Antisophyllum, Vaill. A. G.	Hogweed	Boerhaavia
Anthyllis, Magn. char.		Cressa
Aparine, Tourn.	Clivers, or goose grass	Galium
		Aphaca

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Aphaca, Tourn.	Yellow Vetchling	Lathyrus
Aphyllon, Mich.	Single flowered broom rape	Orobanche
Apios, Boerh.	Knobbed-rooted liquo- rice vetch	Glycine
Apocynum, Tourn.	Dog's bane	Asclepias
Aponogeton, Pont. Anth.	Triple headed pond- weed	Zanichellia
Aquifolium, Tourn.	Holly	Ilex
Arachidna, Plumb.	Ground nut	Arachis
Arachidnoides, Niss. A. G.	Ground nut	Arachis
Araliastrum, Vaill.	Ginseng	Panax
Arapabaca, Plum.	Worm grass	Spigelia
Arctostaphylos, Vaill. A. G.		Arctotis
Arisarum, Tourn.	Friar's cowl	Arum
Armeniaca, Tourn.	Apricot	Prunus
Aronia, Mich.	Floating arum	Orontium
Aruncus, Lin. gen. pl. ed. prim.	Greater meadow sweet	Spiraea
Azarina, Tourn.	Snapper dragon, with ground ivy leaves	Antirrhinum
Ascyrum, Tourn.	St Peter's wort, with great flowers.	Hypericum
Aspergillus, Mich.		Byssus
Asteriscus, Dill. Elth.	Bastard chrysanthemum	Silphium.
Asteriscus, Tourn. Vaill. A. G. & Dill. Elth.	Ox eye	Bupthalamum
Astrocephalus, Vaill. A. G.	Scabious	Scabiosa
Asteriodes, Tourn. & Vaill. A. G.	Ox eye.	Bupthalamum
Asteropterus, Vaill. A. G.	Starwort	Aster
Astragaloides, Tourn.	Bastard milkvetch	Phaca
Atractylis, Vaill. A. G.	Distaff thistle	Carthamum
Aurantium, Tourn.	Orange	Citrus
Aureliana, Laffit.	Ginseng	Panax
Auricula Urbi, Tourn.	Auricula, or Bear's ear	Primula
Azederach, Tourn.	Bead tree	Melia

Dae.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
B		
Baccharis, Vaill. A. G.	Lavender cotton	Santolina
Badiaga, Buxb.	River sponge	Spongia
Ballote, Tourn.	Black Horehound	Ballota
Balsamina, Tourn.	Balsam	Impatiens
Balsamita, Vaill. A. G.	Costmary	Tanacetum
Barba capræ, Tourn.	Greater Meadowsweet	Spiræa
Belladonna, Tourn.	Deadly nightshade	Atropa
Bellidiastrum, Mich.	Middle Daisy	Doronicum
Bellidioides, Vaill. A. G.	Greater, or Ox-eye Daisy	Chrysanthemum
Bellis-Leucanthemum, Mich. gen.	Annual daisy	Bellis
Benzoe, Boerh.	Benjamin tree	Laurus
Bermudiana, Tourn. & Dill. Elth.		Sisyrinchium
Bernhardia, Houst. A. A.	Bastard Ricinus	Croton
Bidentis species, Dill. Elth.	Tick-seeded Sun- flower	Coreopsis
Bihai, Plum.	Banana	Musa
Bistorta, Tourn.	Bistort, or Snakeweed	Polygonum
Blairia, Houst. A. A.	Vervain	Verbena
Blattaria, Tourn.	Moth Mullein	Verbascum
Boletus, Mich.		Phallus
Bonarota, Mich.	Rock Germander	Veronica
Bonduc, Plum.	Nickar tree	Guilandina
Boraginoides, Boerh.	Indian Borrage	Borrago
Borbonia, Plum.	Red Bay of Carolina	Laurus
Botrytis, Mich.		Byssus
Bovista, Dill.		Lycoperdon
Bryonioides, Dill. Elth.	Single seeded Cucum- ber	Sicyos
Bucca-ferrea, Mich.		Ruppia
Buglossum, Tourn.	Bugloss	Anchusa
Bugula, Tourn.	Bugle	Ajuga
Bulbine, Lin. gen. pl. Ed. prim.	Cape Spiderwort	Anthericum
Bulbocastanum, Tourn.	Pig-nut, or Earth-nut	Bunium
Buphthalmum, Tourn.	Ox-eye of old Authors	Anthemis
Bupleuroides, Boerh.	Bastard hare's ear	Phyllis
Bursa Pastoris, Tourn.	Shepherd's pouch	Thlaspi

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
C		
Caapeba, Plum.		Cissampelos
Cacalianthemum, Dill.		Cacalia
Elth.		
Cacao, Tourn.	Chocolate nut	Theobroma
Cainito, Plum.	Star Apple	Chrysophyl- lum
Calaba, Plum.		Calophyllum
Calamintha, Tourn.	Calamint	Melissa
Calamus aromaticus, Pet.	Sweet Rush	Acorus
gen. & Mich.		
Calceolus, Tourn.	Ladies slipper	Cypripedium
Calcitrapa, Vaill.	Star thistle	Centaurea
Calcitrapoides, Vaill.	Thorny Knapweed	Centaurea
Caltha, Tourn. & Vaill.	Marigold	Calendula
A. G.		
Camara, Plum. & Dill.	American Viburnum	Lantana
Elth.		
Cameraria, Dill. gen.	Small water Chickweed	Montia
	or Blinks	
Camphora, Gronov. diss.	Camphire tree	Laurus
Camphorata, Tourn.	Stinking ground Pine	Camphoros- ma
Cannabina, Tourn.	Bastard Hemp	Datisca
Cannacorus, Tourn.	Indian flowering Reed	Canna
Capnoides, Tourn.	Fumatory	Fumaria
Caprifolium, Tourn.	Honey-suckle	Lonicera
Caprificus, Pont. Anth.	Wild Fig-tree	Ficus
Caraguata, Plum.		Tillandsia
Caraxeron, Vaill. A. G.	Globe Amaranth	Gomphrena
Cardaminum, Tourn.	Indian Cress	Tropaeolum
Cardiaca, Tourn.	Motherwort	Leonurus
Cardispermum, Trant.	Marigold	Calendula
A. G.		
Cardui species, Tourn.	Wooly thistle	Onopordum
Carelia, Pont. diss.	Bastard Hemp Agri- mony	Ageratum
Carimpana, Hort. Mal.	Malabar Palm (female)	Borassus
Carlinoides, Vaill. A. G.	Carline thistle	Carlina
Carpobolus, Mich.		Lycoperdon
		Cartha.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Carthamoides, Vaill. A. G.	Bastard Saffron	Carthamus
Carui, Tourn.	Caraway	Carum
Caryophyllata, Tourn.	Avens; or herb bennet	Geum
Caryophyllodendron, Vaill. A. G.	Clove-tree	Caryophyllus
Caryophyllus, Tourn.	Pink clove July flower, Sweet William, &c.	Dianthus
Caryophyllus aromaticus, Tourn.	Clove tree	Caryophyllus
Casia, Tourn.	Poet's Cassia	Osyris
Cassida, Tourn.	Skull-cap.	Scutellaria
Castanea, Tourn.	Chestnut	Fagus
Castorea, Plum.		Duranta
Catanance, Tourn.	Candy Lion's foot	Catananche
Cataria, Tourn.	Catmint	Nepeta
Cedrus, Tourn.	Cedar	Juniperus
Ceiba, Plum.	Silk Cotton tree	Bombax
Centaureum majus, Tour.	Centaury	Centaurea
Centaureum minus, Tour.	Lesser centaury	Gentiana
Cepa, Tourn.	Onion	Allium
Cerasus, Tourn.	Cherry	Prunus
Ceratocephaloides, Vaill. A. G.		Verbesina
Ceratocephalus, Vaill. A. G.		Bidens
Ceratoides, Tourn. Cor.		Axyris
Cereus, Jusf. A. G.	Torch thistle	Cactus
Cerinthoides, Boerh.	Honeywort	Cerithe
Cervispina, Dill. gen.	Buckthorn	Rhamnus
Chærophylli species Tour.	Wild Chervil	Chærophyll- lum
Chamæbuxus, Tourn.	Low Box	Polygala
Chamæcerasus, Tourn.	Dwarf Cherry, or Up- right Honeyfuckle	Lonicera
Chamædaphne, Buxb. A. R.		Andromeda
Chamædaphne, Mich.		Mitchella
Chamædryas, Tourn.	Germander	Teucrium
Chamæjasme, Amm.		Stellera
Chamælea, Tourn.	Widow Wail	Cneorum

Cha-

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Chamælinum, Vaill. B. P.	Least Rupture-wort, or all-seed	Linum
Chamæmelum, Tour. & Vaill. A. G.	Chamomile	Anthemis
Chamænerion, Tourn.	Rosebay Willow herb	Epilobium
Chamæpitys, Tourn.	Ground pine	Teucrium
Chamærhododendros, Tourn.	Dwarf Rosebay	Rhododen- dron
Chamæriphe, Pont.	Dwarf Palm	Chamærops
Chenopodio-morus, Boer.	Strawberry Spinach, or Blite	Blitum
Christophoriana, Tourn.	Herb Christopher	Actæa
Chrysanthemoides, Tour. A. G. Dill. Gen. & Elth.	Hard-seeded Chrysan- themum	Osteospermum
Chrysocome, Dill. Gen.	Goldy Locks	Chrysocoma
Cicuta, Tourn.	Hemlock	Conium
Cicutaria, Tourn.	Great broad-leaved bastard hemlock	Ligusticum
Cinara, Tourn.	Artichoke	Cynara
Cinnamomum, Herm. H. L. B. & Burm. Zeyl.	Cinnamon tree	Laurus
Cirsium, Tourn. & Vaill. A. G.	Soft or gentle thistle	Carduus
Citreum, Tourn.	Citron	Citrus
Clandestina, Tourn.	Broom rape with great Purple flowers, or great Purple herb- bane	Lathræa
Clematitis, Tourn.	Virgin's bower	Clematis
Clitorius, Dill. Elth.		Clitoria
Clymenum, Tourn.	Chichling Vetch	Lathyrus
Coa, Plum.		Hippocratea
Codda Panna, Hort. Mal.		Corypha
Coffe, Jus. A. G.	Coffee tree	Coffea
Colocasia, Boerh.	Great Egyptian arum	Arum
Colocynthis, Tourn.	Coloquintida, or bitter Gourd	Cucumis
Coma aurea, Boerh.	Goldy locks	Chrysocoma
Conocarpodendron, Boer.	Silver tree	Protea
	Ff	Con-

TABLE II.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Convolvulo-Tithymalus, Boerh.		Dalechampia
Conyzella, Dill. Gen.		Erigeron
Conyzoides, Dill. Gen.		Erigeron
Conyzoides, Tourn. A.G.		Carpesium
Coral, Dill. Elth.	Coral tree	Erythrina
Corallo-fungus, Vaill. B. P.		Clavaria
Corali dendron, Tourn.	Coral tree	Erythrina
Coralloides, Tourn. & Mich.		Clavaria
Coralloides, Dill. Musc.	Liverwort	Lichen
Cordylinae, Roy. Lugd.	Adam's Needle	Yucca
Corindum, Tourn.	Heart seed, or Heart pea	Cardiosper- mum
Cornucopioides, Scheuch.		Cornucopiae
Corona imperialis, Tour.	Crown Imperial	Fritillaria
Corona solis, Vaill. A.G.	Sun-flower	Helianthus
Tourn. & Dill. Elth.		
Coronopus, Tourn.	Bucks-horn Plantain	Plantago
Corrigiola, Dill. gen. & Mæhr.	Verticillate knot-grass	Illecebrum
Cortusa, Plum.		Thalia
Corydalis, Dill. gen.	Bladder Fumatory	Fumaria
Cotinus, Tourn.	Venice Sumach	Rhus
Cotula, Tourn.		Anacyclus
Corbaril, Plum.	Locust tree	Hymenæa
Crepis, Vaill. A. G.	Tangier sow thistle	Scorzonera
Crocodilium, Vaill.	Centaury without stems	Centaurea
Crocodilodes, Vaill.	Distaff thistle	Atractylis
Cruciata, Tourn.	Cross-wort	Valantia
Cucularia, Juss. A. G.	Fumatory with a naked stalk	Fumaria
Cujete, Plum.	Calabash tree	Crescentia
Cuminoides, Tourn.	Wild or bastard Cumin	Lagöecia
Cururu, Plum.		Paullinia
Cyanus, Tourn. & Vaill. A. G.	Blue bottle "	Centaurea
Cyathoides, Mich.	Cup Mushroom	Peziza
Cydonia, Tourn.	Quince tree	Pyrus
Cynocrambe, Tourn.	Dog's Cabbage	Theligonum
		Cynop.

TABLE II.

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GENERIC NAMES Rejected.	ENGLISH NAMES.	LINNEAN GENERA
Cynoglossoides, Isnard. A. G.	Borrage	Borrago
Cynomorium, Garc.		Cynometra
Cynorrhinchium, Mich.		Mimulus
Cyperella, Mich.		Schoenus
Cyperoides, Tour. Scheuc. & Mich.		Carex
Cysticapnos, Boerh.	Bladder Fumatory	Fumaria
D		
Dalea, Lin. gen. pl. Ed. prim.		Pforalea
Damasonium, Tour. & Vaill. A. G.	Star-headed water Plantain	Alisma
Dantia, Petit. gen.		Isnardia
Dens Canis, Tourn.	Dog's tooth violet	Erythronium
Dens Leonis, Tourn.	Dandelion	Leontodon
Dichotophyllum, Dill. gen.		Cerätophyl- lum
Diconangia, Mich.		Itea
Dimorphotheca, Vaill. A. G.	Marigold	Calendula
Diototheca, Vaill. A. G.		Morina
Dodonæa, Plum.	Holly with wing'd leaves	Ilex
Doria, Dill. gen. & Eth.	Golden rod	Solidago
Dortmanna, Rudb. A. S.	Water Glandiole	Lobelia
Dracunculoides, Boerh.	Blood flower	Hæmanthus
Dracunculus, Tourn.	Dragons	Arum
Duglassia, Houst. A. A.		Volkameria
E		
Echinopus, Tourn. & Vaill. A. G.	Globe thistle	Echinops
Echinoides, Dill. gen.		Lycopsis
Elate, Mus. Cliff.	Common Palm, or Date tree	Phoenix
Elaterium, Boerh.	Wild, spirting, or Af- fes Cucumber	Momordica
	F f 2	Elatine,

TABLE II.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Elatine, Dill. gen.	Fluellin, or female Speedwell	Antirrhinum
Elephas, Tourn.	Elephant's head	Rhinanthus
Elichrysus, Tourn. & Dill. Elth.	Cassidony, Goldylocks, or Eternal flower	Gnaphalium
Elymus, Mich.		Zizania
Emerus, Tourn.	Scorpion Senna	Coronilla
Enula, Cæsalp. & Magnol.	Elecampane	Inula
Ephemerum, Tourn.	Virginian Spiderwort	Tradescantia
Erebinthus, Mich.		Cracca
Eresia, Plum.		Theophrasta
Ericæ species, Tourn.		Andromeda
Erinacea, Tourn.	Spanish hedge-hogthorn	Anthyllis
Erinaceus, Dill. & Mich.		Hydnum
Eriocephalus, Vaill. A. G.	Spear thistle	Carduus
Eriophorus, Vaill. A. G.	Downy sow thistle, or Woolly hawkweed	Andryala
Erucago, Tourn.	Square-codded rocket, of Montpelier	Bunias
Eunonymoides, Isnard. A. G.	Staff tree	Celastrus
Eupatoriophalacron, Dill. Elth. & Vaill. A. G.		Verbesina
Euphorbium, Isnard. A. G.	Burning thorny plant	Euphorbia
F		
Faba	Bean	Vicia
Fabago, Tourn.	Bean caper	Zygophyl- lum
Fagopyrum, Tourn.	Buck wheat, or brank	Polygonum
Ferrum equinum, Tourn.	Horseshoe vetch	Hippocrepis
Ficaria, Dill. gen.	Pilewort, or lesser ce- landine	Ranunculus
Ficoides, Niss. A. G. Dill. gen. & Elth.		Ailsoon
Ficoides, Tourn. A. G.	Fig marigold	Mesembryan- themum
Filago, Vaill. A. G. & Tourn.	Cudweed	Gnaphalium
Filipendula, Tourn.	Dropwort	Spiræa Fluvialis,

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Fluvialis, Vaill. A. G. & Mich.		Naias
Fœniculum, Tourn.	Fennel	Anethum
Fœnum græcum, Tourn.	Fenugreek	Trigonella
Franca, Mich.		Frankenia
Frangula, Tourn.	Black, or berry-bearing alder	Rhamnus
Fungoidaster, Mich.		Elvela
Fungoides, Mich.		Elvela
Fungoides, Dill.		Clavaria
Fungoidis species, Vaill.	Cup Mushroom	Peziza
B. P.		
Fungoidis species, Vaill.		Elvela
B. P.		

G

Gale, Tourn. A. G. and Dill. gen.	Sweet willow, gale, or Dutch myrtle	Myrica
Galeobdolon, Dill. gen.	Yellow archangel, or dead nettle	Galeopsis
Galeopsis, Tourn.	Base horehound	Stachys
Gallium, Tourn.	Ladies bed-straw, or cheefe rennet	Galium
Geaster, Mich.		Lycoperdon
Genista, Tourn.	Broom	Spartium
Genista-spartium, Tourn.	Furze, whins, or gorse	Ulex
Genistella, Tourn.	Dwarf broom	Genista
Gerbera, Lin. gen. pl. Ed. prim.		Arnica
Gefnera, Plum.		Gefneria
Geum, Tourn.	Kidney-wort	Saxifraga
Glaucium, Tourn.	Horned poppy	Chelidonium
Glaucoides, Mich.	Water purslane	Peplis
Gnaphaloides, Tourn.	Bastard cudweed	Micropus
Graminifolia, Dill. gen.	Triple-headed pond- weed	Zannichellia
Granadilla, Tourn. and Dill. Elth.	Passion flower	Passiflora
Grossularia, Tourn.	Gooseberry	Ribes
Guaicana, Tourn.	Indian date plumb	Diospyros
Guaiaua, Tourn.	Pay plumb	Psidium
		Guana.

TABLE II.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Guanabanus, Plum.	Custard apple	Annona
Guazuma, Plum.	Bastard cedar of Ja- maica	Theobroma
Guidonia, Plum.		Samyda
H		
Hacub, Vaill. A. G.		Gundelia
Harmala, Tourn.	Wild Syrian rue	Peganum
Hedypnois, Tourn.		Hyoseris
Heisteria, Lin. gen. pl. Ed. prim.		Polygala
Heleniastrum, Vaill. A. G.	Bastard Sun flower	Helenia
Helenium, Vaill. A. G.	Starwort	Aster
Helenium, Morisf. Raj. Herm. Rivin. Rupp. Knaut and Vail.	Elecampane	Inula
Helianthemum, Tourn.	Dwarf cistus; or little sunflower	Cistus
Helichryfoides, Vaill. A. P.		Scriphium
Helichryfoides, Vaill. A. G.		Gnaphalium
Helichrysum, Vaill. A. G.	Cassidony, goldy locks, eternal flower	Gnaphalium
Helleborine, Tourn.	Bastard hellebore	Serapias
Helminthotheca, Vaill. A. G.		Picris
Helxine, Lin. gen. pl. Ed. prim.	Barley, or brank	Polygonum
Henna, Ludw.		Lawsonia
Hepatica, Dill. gen.	Noble liverwort, or hepatica	Anemone
Hepatica, Mich.		Marchantia
Herba Paris, Tourn.	True-love, or one-berry	Paris
Hermodyctylus, Tourn.	Tuberose Iris	Iris
Hieracoides, Vaill. A. G.	Bastard hawkweed	Crepis
Hippocastanum, Tourn.	Horse chestnut	Æsculus
Hippuris, Dill. gen. and Pont. Anth.		Chara
Horminum, Tourn.	Clary	Salvia
		Hya-

TABLE II.

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GENERIC NAMES. REJECTED.	ENGLISH NAMES	LINNEAN GENERA.
Hyacinthus stellaris, Raj. Star Hyacinth Meth.		Scilla
Hydroceratophyllon, Vaill. A. G.		Ceratophyl- lum
Hydrophace, Buxb. cent. Duck meat		Lemna
Hypericoides, Plum. St Peter's wort		Ascyrum
Hypocistis, Tourn. Rape of cistus		Afarum
Hypophyllocarpoden- dron, Boerh.		Protea
Hypopitys, Dill. gen.		Monotropa
Hysterophorus, Vaill. A. Bastard feverfew G.		Parthenium

I

Jabotapita, Plum.		Ochna
Jacea, Tourn. Dill. gen. Knapweed and Vaill.		Centaurea
Jacobææ species, Tourn. Ragworts, (fundry of Solidago Vaill. A. G. old authors)		
Jacobææ species, Tourn. Ragworts, (fundry of Senecio old authors)		
Jacobæastrum, Vaill. A. G. African ragwort		Othonna
Jacobæoides, Vaill. A. G. African ragwort		Othonna
Jalapa, Tourn. Marvel of Peru		Mirabilis
Jan-rajá, Plum.		Rajania
Jasminoides, Niss. A. G. Bastard jasmine		Lycium
Icaco, Plum. Cocoa plum		Chrysobala- nus
Ilex, Tourn. Evergreen oak		Quercus
Indigo, Inard. A. G. Goat's rue		Galega,
Inga, Plum.		Mimosa
Jonthlaspi, Tourn. Treackle mustard		Clypeola
Isoë, Plum. Skrew tree		Heliicteres
Juncago, Tourn. & Mich. Arrow-headed grass		Triglochin
Jussieuia, Houst. A. A.		Jatropha

K

Kali, Tourn.	Glass-wort	Salsola
Karatas, Plum.	Pine apple	Bromelia
Katovindel, Hort. Mal.	Palm, or date tree	Phoenix
		Kæmp.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Kempfer, Haust. A. A.	Vervain	Verbena
Keratophyton, Boerh.		Lithoxylum
Ketmia, Tourn.	Althæa frutex, or Syri- an mallow	Hibiscus
Kleinia, Lin. gen. pl. Ed. prim.	Foreign colt's foot	Cacalia
Knawell, Dill. gen.	German knot grass	Scleranthus
Kodda-pail, Plum.	Water houseleek of Egypt	Pistia

L

Lacryma Job. Tourn.	Job's tears	Coix
Lampfana, Vaill. A. G.	Nipplewort	Lapsana
Lancifia, Pont. diff.		Cotula
Lapathum, Tourn.	Dock	Rumex
Lappa, Tourn. & Vaill. A. G.	Burdock	Arctium
Larix, Tourn.	Larch tree	Pinus
Laurentia, Mich.		Lobelia
Lauro-ceratus, Tourn.	Laurel	Prunus
Ledum, Mich.		Andromeda
Lens, Tourn.	Lentils	Ervum
Lentibularia, Vaill. A. G. and Dill. gen.	Water milfoil	Utricularia
Lenticula, Mich. & Dill. gen.	Duck meat	Lemna
Leontodontoides, Mich. gen.		Hyoferis
Leontopetalen, Tourn.	Lion's leaf	Leontice
Lepidocarpodendron, Boerh.		Protea
Leptostachia, Mich.		Phryma
Leucanthemum, Tourn.	Chrysanthemum with white rays, or ox- eye daisy	Chrysanthe- mum
Leucojum, Tourn.	Stock July flower, and wall flower	Cheiranthus
Lichen, Dill. Musc.		Marchantia
Lichenastrum, Dill. Musc.		Jungerman- nia
Lichenoides, Dill. Musc.		Lichen
		Lilac

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Lilac, Tourn.	Lilac, or pipe tree	Syringa
Lilialtrum, Tourn.	White day lily, St. Bruno's lily, or great savoy spiderwort	Hemerocallis
Lilio-asphodelus, Tourn.	Day lily, or lily aspho- del	Hemerocallis
Lilio-hyacinthus, Tourn.	Lily-hyacinth	Scilla
Lilio-narcissus, Tourn.	Lily-daffodil	Amaryllis
Lilium-convallium, Tour.	Lily of the valley	Convallaria
Limnopeuce, Vaill. A. G.		Hippuris
Limodorum, Tourn.	Purple bird's nest	Orchis
Limon, Tourn.	Lemon	Citrus
Limonium, Tourn.	Sea lavender	Statice
Linagrostis, Mich. and Tourn.	Cotton grafs	Eriophorum
Linaria, Tourn.	Toad flax	Antirrhinum
Lingua cervina, Tourn.	Hart's tongue	Asplenium
Linocarpon, Mich.	Least rupture-wort, or all feed	Linum
Lirium, Roy.	Lily	Lilium
Lithophyton, Tourn.		Lithoxylum
Lonchitis, Tourn.	Rough spleen-wort	Polypodium
Luffa, Tourn. A. G. Dill.	Egyptian cucumber	Momordica
gen. and Elth.		
Lunularia, Mich.		Marchantia
Lupinaster, Buxb.		Trifolium
Lupulus, Tourn.	Hop	Humulus
Luteola, Tourn.	Wild Woad, or Dyer's weed	Reseda
Lychnidea, Dill. Elth.	Bastard Lychnis	Phlox
Lychni-scabiosa, Boerh.		Knautia
Lycogala, Mich.		Mucor
Lycoperdastrum, Mich.		Lycoperdon
Lycoperdoides, Mich.		Lycoperdon
Lycopersicon, Tourn.	Wolf's peach, or love apple	Solanum
Lycopodioides, Dill.		Lycopodium
Musc.		

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
M		
Malachodendron, Mich.		Stewartia
Malacoides, Tourn.	Bastard mallow	Malope
Malva, Tourn.	Rose mallow, or hol- lyhock	Alcea
Malvaviscus, Dill. Elth.	Berry-bearing hibiscus	Hibiscus
Malvinda, Dill. Elth.	Indian mallow, with single seeds	Sida
Malus, Tourn.	Apple	Pyrus
Mamei, Plum.	Mammec	Mammea
Mancanilla, Plum.	Manchineel	Hippomane
Mangles Plum.	Pec-kandel of the Indi- ans	Rhizophora
Mangostans, Garc. A. A.	Mangostan	Garcinia
Manihot, Tourn. & Dill. Elth.	Cassava	Jatropha
Maurocenia, Lin. gen. pl. Ed. prim.	Hottentot cherry	Cassine
Mays, Tourn.	Indian, or Turkey wheat	Zea
Medica, Tourn.	Snail trefoil, and Me- dic, or Lucern grass	Medicago
Melanoschoenus, Mich. gen.	Round black-headed marsh rush, or bog rush	Schoenus
Melilobus, Mich.	Three thorn'd acacia	Gleditsia
Melilotus, Tourn.	Melilot	Trifolium
Melo, Tourn.	Melon	Cucumis
Melocactus, Tourn.	Melon thistle	Cactus
Melongena, Tourn.	Mad apple, or egg plant	Solanum
Melopepo, Tourn.	Buckler gourd	Cucurbita
Memecylum, Mich.	Trailing arbutus	Epigæa
Methonica, Tourn.	Superb lily	Gloriosa
Meum, Tourn.	Spignel	Athamanta
Michelia; Houft. A. A.		Pontederia
Michelia, Amm. Aët. Pet.		Gmelina
Microleucenymphea, Boerh.	Frog's bit	Hydrocharis Mil-

TABLE H.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Millefolium, Tourn.	Yarrow, or milfoil	Achillea
Mitra, Houst.		Ophiorrhiza
Mitreola, Lin. gen. pl. Ed. prim.		Ophiorrhiza
Moldavica, Tourn.	Turkey, or Moldavian baulm	Dracoceph- alums
Molle, Tourn.	Peruvian mastich	Schinus
Molucca, Tourn.	Molucca baulm	Moluccella
Moly, Boerh.	Moly with lily flowers, or Homer's Moly	Allium
Monbin, Plum.	Brasilian plumb	Spondias
Monilifera, Vaill. A. G.	Hard-seeded chrysan- themum	Osteosper- mum
Monospermalthæa, Inar. A. G.		Waltheria
Montia, Houst. A. A.		Heliocarpos
Monoecarpus, Rupp.	Blite, or strawberry Spinach	Blitum
Morus ranzæ, Tour. A. G.	Frog's bit	Hydrocharis
Moschatellina, Tourn.	Tuberose moschatel, or hollow root	Adoxa
Mucilago, Mich.		Mucor
Murpucja, Tourn.	Passion flower	Passiflora
Muscari, Tourn.	Grape hyacinth	Hyacinthus
Muscoides, Mich.		Jungerman- nja
Myofotis, Tourn.	Mouse-ear chickweed	Cerastium
Myofuros, Dill. gen.	Mouse tail	Myofurus
Myrobatindum, Vaill. A. G.	American Viburnum	Lantana

N

Narcisso-Leucojum, Tour.	Greater snowdrop	Leucojum
Nasturtium, Tourn.	Cress	Lepidium
Nelumbo, Tourn.	Indian water lily	Nymphaea
Nhandiroba, Plum.		Fevillea
Ninsi, Breyn. diff.	Ginseng	Panax
Nummularia, Nov. gen.		Holosteum
Nux, Tourn. and Boerh.	Walnut	Juglans
Nymphoides, Tourn.	Lesser yellow water lily with fringed flowers	Menyanthes

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
O		
Obeliscotheca, Vaill.	A. Dwarf sunflower	Rudbeckia
G. & Dill. Elth.		
Ochrus, Tourn.	Wild winged pea	Pisum
Odontitis, Dill. gen.	Red meadow eye bright	Euphrasia
Omphalodes, Tourn.	Venus's navel-wort	Cynoglossum
Onagra, Tourn.	Tree primrose	Oenothera
Onobrychis, Tourn.	Cock's head, or Saint Foin	Hedysarum
Ophris, Tourn.	Tway blade	Ophrys
Opulus, Tourn. & Vaill.	Marsh elder, or gelder rose	Viburnum
A. G.		
Opuntia, Tourn.	Indian fig, or prickly pear	Cactus
Orchidion, Mich.		Arethosa
Oseofelinum, Tourn.	Mountain parsley	Athamanta
Ornithopodium, Tourn.	Bird's foot	Ornithopus
Ornus, Mich.	Ash	Fraxinus
Orobanchoides, Tourn.		Monotropa
A. G.		
Ostrya, Mich.	Hornbeam	Carpinus
Oxycoccus, Tourn.	Marsh Whortle berries, Moss berries, Moor berries	Vaccinium
Oxyoides, Garc. A. A.	Sensitive Wood Sorrel	Oxalis
Oxys, Tourn.	Wood Sorrel	Oxalis

P

Padus, Lin. gen. pl. Ed.	Bird Cherry	Prunus
Prim.		
Paliurus, Tourn.	Christ's thorn	Rhamnus
Panacea, Mich.	Ginseng	Panax
Panicastrella, Mich.		Cenchrus
Papaya, Tourn.	Papaw	Carica
Papis, Mich.		Orvala
Paronychia, Tourn.	Mountain Knot-grass	Illecebrum
Parthenastrum, Niss. A.	Bastard Feverfew	Parthenium
G. Dill. gen. & Elth.		
Patagonica, Dill. Elth.		Patagonula
		Pavia,

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Pavia, Boerh.	Scarlet Horse-Chestnut	<i>Aesculus</i>
Pedicularis species, Tourn.	Yellow Rattle, Cock- comb, or Loufewort	<i>Rhinanthus</i>
Pelecinus, Tourn.	Clusius's foreign hat- chet Vetch	<i>Biserrula</i>
Penæa, Plum.	Tree Milkwort, with a rough box leaf	<i>Polygala</i>
Pentagonotheca, Vaill. A. G.	Fingrigo	<i>Pisonia</i>
Pentaphylloides, Tour.	Cinquefoil, whose leaves are not quite quinate	<i>Potentilla</i>
Pentapterophyllum, Dill. gen.	Water Milfoil	<i>Myriophyllum</i>
Pepo, Tourn.	Pumpion	<i>Cucurbita</i>
Percepier, Dill. gen.	Parsley Piert	<i>Aphanes</i>
Pereskia, Plum, Lin. gen. pl. Ed. prim.	Gooseberry of the A- mericans; or Blad Apple	<i>Cactus</i>
Pertilymenum, Tourn.	Trumpet Honeyfuckle	<i>Lonicera</i>
Persea, Plum.	Avocado, or Avogato Pear	<i>Laurus</i>
Perfica, Tourn.	Peach	<i>Amygdalus</i>
Perficaria, Tourn.	Arse-smart, or Perfica- ria	<i>Polygonum</i>
Pervinca, Tourn.	Periwinkle	<i>Vinca</i>
Petasites, Tourn. & Vaill. A. G.	Butterburr, or Pesti- lent wort	<i>Tussilago</i>
Petilium, Lin. gen. pl. Ed. prim.	Crown imperial	<i>Fritillaria</i>
Phalangium, Tourn.	Spiderwort	<i>Anthericum</i>
Phalloboletus, Mich.		<i>Phallus</i>
Phillyreastrum, Vaill. A. G.		<i>Morinda</i>
Pilosella, Vaill. A. G.	Creeping Mouse ear	<i>Hieracium</i>
Pimpinella, Tourn.	Burnet	<i>Poterium</i>
Pinastella, Dell. gen.		<i>Hippuris</i>
Pinguin, Dill. Elth.	Wild Ananas	<i>Bromelia</i>
Pittonia, Plum.		<i>Tournefortia</i>
Plantaginella, Dill. gen.	Least Water Plantain	<i>Limosella</i> Plan-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
Plantanocephalus, Vaill. A. G.	Button-wood	Cephalanthus
Poliifolia, Buxb. A. R.	Marsh Cistus, or wild Rosemary	Andromeda
Polium, Tourn.	Poley Mountain	Teucrium
Polyacantha, Vaill. A. G.	Casaubon's thistle, sup- posed the true Fish thistle or Acarna of Theophrastus	Carduus
Polygaloides, Dill. gen.	Milk-wort	Polygala
Polygonatum, Tourn.	Solomon's Seal	Convallaria
Polygonifolia, Dill. gen.		Corrigiola
Polygonoides, Tourn.		Calligonum
Polyporus, Mich.		Boletus
Populago, Tourn.	Marsh Marigold	Caltha
Porophyllum, Vaill. A. G.	Cacalia with perforate leaves	Cacalia
Porrum, Tourn.	Leek	Allium
Portula, Dill. gen.	Water Purslane	Peplis
Portulacastrum, B. Jus.	Horfe Purslane	Trianthema
Potamopithys, Buxb. A. R.		Elatine
Primula veris, Tourn.	Primrose	Primula
Provenzalia, Petit. Gen.	Water Dragons	Calla
Pseudoacacia, Tourn.	False Acacia	Robinia
Pseudocyperus, Mich.		Schoenus
Pseudodictamnus, Tourn.	Bastard Dittany	Marrubium
Pseudoruta, Mich.	Three leaved Rue	Ruta
Psyllium, Tourn.	Flea-wort	Plantago
Ptarmica, Tourn.	Sneeze-wort, bastard Pellitory, or Goose- tongue	Achillea
Pteroccephalus, Vaill. A. G.	Scabious	Scabiosa
Pterospermadendron, Am.		Pentapetes
Pulsatilla, Tourn.	Pasque flower	Anemone
Quamoclit, Tourn.		Ipomoea Quina

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Quinquefolium, Tourn.	Cinquefoil	Potentilla
Quinquina, Condam. A. G.	True Jesuits bark-tree	Cinchona
R		
Radicula, Dill. Gen.	Water Radish	Sisymbrium
Radiola, Dill. gen.	Least Rupture-wort, or All-seed	Linum
Ranunculoides, Vaill. A. G.	Water Crowfoot	Ranunculus
Rapa, Tourn.	Turnip	Brassica
Raphanistrum, Tourn.	White flowered Char- lock with jointed pods	Raphanus
Rapistrum, Tourn.	Sea Cabbage	Crambe
Rapunculus, Tourn.	Rampions	Phyteuma
Rapuntium, T. & Dill. Elth.	Cardinal flower	Lobelia
Rhabbarbarum, Tourn.	Rhubarb	Rheum
Rhagadioloides, Vaill. A. G.		Hyoferis
Rhagadiolus, Vaill. A. G. & Tourn.		Lapsana
Rhamnoides, Tourn.	Bastard Rhamnus, or Sea Buckthorn	Hippophae
Rhaponticoides, Vaill.	Centaury	Centaurea
Rhapontium, Vaill.	Centaury	Centaurea
Ribesum, Dill. Elth.	Currant tree	Ribes
Ricinocarpus, Boer. & Bur.		Acalypha
Ricinoides, Tourn.	Bastard Ricinus	Croton
Rivina, Plum.		Rivinia
Royenia, Houft. A. A.		Loeselia
Rojoc, Plum.		Morinda
Ros folis, Tourn.	Sun-dew	Drosera
Rubeola, Tourn.	Petty Madder	Crucianella
Rudbeckia, Houft. A. A.	Button-tree	Conocarpus
Ruppia, Aët. Ang.	Grass wrack	Zostera
Ruta muraria, Tourn.	Wall-rue, or Tent- wort	Asplenium
		Sabina

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
S		
Sabina, Boerh.	Savine	Juniperus
Sagitta, D. g. & Va. A. G.	Arrow-head	Sagittaria
Salicaria, Tourn.	Willow herb, or purple Loosestrife	Lythrum
Salvinia, Mich.		Marfilea
Santolinoides, Va. A. G. & Mich. gen.		Anacyclus
Sapota, Plum.	Sapota	Achras
Sassafras, Off.	Sassafras tree	Laurus
Saururus, Plum.	Lizard's tail.	Piper
Schundapana, Hort. Mal.		Caryota
Scirpocyperus, Mich.	Rush Grass	Scirpus
Scirpoides, Mont.		Carex
Sclearea, Tourn.	Clary	Salvia
Scorodopratum, Mich.	Great round-headed, or turkey Garlick	Allium
Scorpioides, Tourn.	Caterpillars	Scorpinurus
Scorzoneroideles, Va. A. G.	Vipers grass	Scorzonera
Sebestena, Dill. Elth.	Sebesten	Cordia
Securidaca, Tourn.	The true hatchet Vetch, or Sickle-wort	Coronilla
Sedifpecies, Tourn.	Houseleek	Sempervivum
Selaginoides, Dill. Musc.		Lycopodium
Selago, Dill. Musc.	Upright fir moss	Lycopodium
Senecionis species, D. Elth.		Erigeron
Senna, Tourn.	Senna of the Shops	Cassia
Seriana, Plum.		Paullinia
Sesamoides, Tourn.	Bastard Rocket	Rafeda
Sherardia, Vail.	Vervain	Verbena
Sherardia, Mont. Epist.		Galenia
Sicyoides, Tourn.	Single-seeded Cucum- ber	Sicyos
Siliqua, Tourn.	Carob-tree, or St John's bread	Ceratonia
Siliquastrum, Tourn.	Judas tree	Cercis
Silybum, Vail. A. G.	Milk thistle, or Lady's Thistle	Carduus
Sinapi, Tourn.	Mustard	Sinapis

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES	LINNEÆAN GENERA.
Sinapistrum, Tourn.	Bastard Mustard	Cleome
Siphonanthemum, Amm. Act. Petrop.		Siphonanthus
Sifarum, Tourn.	Skirret	Sium
Siryinchium, Tourn.	Iris with a double bulb, called Spanish-nut	Iris
Sloana, Plum.	Apeiba of the Brafilians	Sloanea
Solanoides, Tourn. A. G.	American Night-shade	Rivinia
Sorgum, Mich.	Indian Millet	Holcus
Spartium, Tourn.	Single-seeded broom	Genista
Sphondylium, Tourn.	Cow Parsnip	Heracleum
Sphondylococcus, Mich.	Johnsonia	Callicarpa
Stachyarpagophora, Vaill. A. G.	Cock's-comb	Celosia
Staphylo dendron, Tourn.	Bladder nut	Staphylea
Stellaria, Dill. gen.		Caillitriche
Stellaris, Dill. gen.	Yellow star of Bethlem	Ornithogalum
Stœchas, Tourn.	French Lavender	Lavandula
Stramonium, T. & Pont.	Thorn apple	Datura
Stratiotes, Vaill. A. G.	Water Milfoil, or water Violet	Hottonia
Stratiotes, Dill. gen.	Frog's bit	Hydrocharis
Struthia, Royen.		Gnidia
Suber, Tourn.	Cork-tree	Quercus
Succisa, Vaill. A. G.	Devil's-bit	Scabiosa
Suillus, Mich.		Boletus
Symphoricarpos, D. E.	Shrubby St Peter's- wort	Lonicera
Syringa, Tourn.	Mock Orange, or Sy- ringa	Philadelphus

T

Tamariscus, Tourn.	Tamarisk	Tamarix
Tamnus, Tourn.	Black Bryony	Tamus
Tapia, Plum.	Garlick pear	Cratæva
Taraxaconastrum, V. A. G.		Hyoseris
Taraxaconoides, V. A. G.	Dandelion	Leontodon
Tarchonanthus, Va. Act.	Jesuit's bark-tree, false- ly so called	Iva
Telephiasstrum, Dill. El.	African Purslane	Portulaca
Telephioides, T. & D. El.	Bastard Orpine	Andrachne
Tenga, Hort. Mal.	Cocoa Nut	Cocos
	H h	Tere.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA
Terebinthus, Tourn.	Turpentine-tree	Pistacia
Ternatea, Tourn. A. G.		Clitoria
Tetrahit, Dill. gen.	Bastard hemp	Galeopsis
Thlaspidium, Tourn.	Buckler Mustard	Biscutella
Thymbra, Tourn.	Savory with verticillate flowers	Satureja
Thymelæa, Tourn.	Mezereon, or spurge-Laurel	Daphne
Thysselinum, Tourn.	Milky Parsley	Selinum
Tinus, To. & Vaill. A. G.	Laurustinus	Viburnum
Titanokeratophyton, Boe.		Lithoxylon
Tithymaloides, Tourn.	Bastard spurge	Euphorbia
Tithymaloides(an) Klein. Monagr.	Cabbage-tree, or Carnation-tree	Cacalia
Tithymalus, Tourn.	Spurge	Euphorbia
Tournefortia, Pont. Epif.	Amber-tree	Anthospermum
Toxicodendron, Tourn.	Poison-tree	Rhus
Tragacantha, Tourn.	Goat's-thorn	Astragalus
Tragopogonoides, V. A. G.	Goat's beard with crooked seeds	Tragopogon
Tragofelium, Tourn.	Burnet Saxifrage	Pimpinella
Tribuloides, Tourn.	Water caltrops	Trapa
Trichomanes, Tourn.	English black Maiden-hair	Asplenium
Trifolium, Mich.	White flowered meadow trefoil, honey-suckle grass, or Dutch clover	Trifolium
Trilopus, Mich.	Witch hazel	Hamamelis
Triosteospermum, D. El.	Fever-root, Doctor Tinkar's weed, or false Ipecacuana	Triosteum
Trixis, Mich.		Proserpinaca
Tulipifera, Cateth.	Tulip-tree	Liriodendron
Tuna, Dill. Elth.	Indian Fig, or prickly pear	Cactus
Tunica, Dill. Elth.	Pink	Dianthus
U		
Valdia, Plum.		Ovieda
Valerianella, Tour. & Va.	Lamb's Lettuce, or Corn-sallad	Valeriana
		Val.

TABLE II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINEAN GENERA.
Vallisneroides, Mich.		Vallisneria
Vanilla, Plum.	Vanilla	Epidendrum
Vanrheedia, Plum.		Rheedia
Vesicaria, Rivinus	Heart-seed, or heart- pea	Cardiosper- mum
Vesicaria, Tourn.	Madwort with blad- dery pods	Alyssum
Virga aurea, T. & V. A. G.	Golden rod	Solidago
Virga sanguinea, Dill.	Female Dog-wood, Dog-berry, or Gat- ter-tree	Cornus
Viscago, Dill. Elth.	Viscous campion, or Catch-fly	Silene
Viticella, Mich.		Galax
Viticella, Dill. gen.	Virgin's bower, or Lady's bower	Clematis
Vitis Idea, Tourn.	Whortle berry	Vaccinium
Ulmaria, Tourn.	Meadow-sweet, or Queen of the Mea- dows	Spiraea
Unifolium, Dill. gen.	One-blade	Convallaria
Volubilis, Dill. Elth.		Ipomoea
Usnea, Dill. Musc.	Tree-moss	Lichen
Uva urfi, Tourn.	Spanish-redwhort, or Bearberries	Arbutus
Vulneraria, Tourn.	Kidney Vetch, or La- dy's finger	Anthyllis
X		
Xeranthemoides, D. Elt.		Xeranthemum
Xiphium, Tourn.	Bulbous Iris	Iris
Xylon, Lin. gen. pl. Ed. pr.	Silk Cotton-tree	Bombax
Xylon, Tourn.	Cotton	Gossypium
Xylosteum, Tourn.	Fly Honeyfuckle	Lonicera
Z		
Zacintha, Va. A.G. & T.	Wart succory	Lapsana
Zanoxia, Plum.		Commelina
Ziziphus, Tourn.	Jujube-tree	Rhamnus
H h 2		APPENDIX.

A P P E N D I X.

A TABLE, containing such English Names of plants as have been most generally received, whether Specific or Generic ; and shewing the Titles of the Genera under which they are severally ranged in the LINNAEAN System, together with the trivial names of many Species.

A B E L E

Abelmosk	Populus alba
Acacia	Hibiscus abelmoschus
Acacia, false	Mimosa
Acacia, German	Robinia
Acacia, three-thorned or Honey locust	Prunus
Acajou ; or Cashew nut	Gleditsia triacanthos
Acanthus, Corinthian ; or Brank ursine	Anacardium occidentale
Aconite	Acanthus spinosus
Aconite, winter	Aconitum
Acrostic	Helleborus hyemalis
Adam's needle	Acrostichum
Adder's-wort	Yucca gloriosa
Adder's or Serpent's tongue	Polygonum
Adrachne	Ophioglossum
Agaric	Arbutus andrachne
Agaric of the oak	Agaricus
Agnus castus ; or Chaste tree	Boletus ignarius
Agnus castus ; Oil tree ; or Palma Christi	Vitex
Agrimony	Ricinus communis
Agrimony, hemp	Agrimonia
Agrimony, Base hemp	Eupatorium cannabinum
Agrimony, Naked-headed hemp	Ageratum
Agrimony, water hemp	Verbena
Aque tree ; or Sassafras	Bidens
Akraw	Laurus sassafras
Alaternus	Lichen
Alaternus, Base	Rhamnus alaternus
Alder	Phytica
	Betula alnus

Alders,

Alder, Black	Rhamnus
Alecost, or Costmary	Tanacetum balsamita
Alehoof; Gill; or Ground ivy	Glechoma hederacea
Alexanders	Smyrniolum olusatrum
Alkali; or Sal-kali	Salicornia
Alcanet	Lithospermum officinale
Allgood; Good Henry; or English mercury	Chenopodium bonus HEN- ricus
Allheal, Clowns,	Stachys palustris
Allheal, Hercules's	Heracleum panaces
Allseed	Linum
All-spice; or Jamaica pepper	Myrtus pimenta
Alligator; or Avocado pear	Laurus persea
Almond	Amygdalus communis
Almond, Ethiopian or African	Brabejum stellulifolium
Almond, Dwarf	Amygdalus nana
Aloe, Succotrine	Aloe perfoliata
Aloe, American	Agave
Aloe, Water, or Water soldier	Stratiotes aloides
Aloes, Wood	Excoecaria agallocha
Althæa frutex	Hibiscus syriacus
Alyson, Rough-leaved; or Ayl- wort	Subularia aquatica
Amaranthus; or Flower-gentle	Amaranthus
Amaranth, Globe	Gomphrena
Amaranthus tricolor	Amaranthus tricolor
Amber tree	Anthospermum
Amellus of Virgil	Aster amellus
Amomum Plinii	Solanum pseudo-capsicum
Amomum, German	Sison
Anemone, Common	Anemone hortensis
Anemone, Wood	Anemone silvestris
Ananas; or Pine apple	Bromelia Ananas
Angelica	Angelica archangelica
Angelica, Berry-bearing	Aralia
Angelica tree	Aralia
Angelica, Wild; or Goutwort	Ægopodium
Anise	Pimpinella anisum
Anise tree of China	Illicium anisatum
Anotta; or Arnotta	Bixa orellana
Apeiba of the Brazilians	Sloanea
A. ple	Pyrus malus
Apple, Adam's	Citrus
Apple, Bitter	Cucumis colocynthis

Apple,

Apple, Blad ; or West Indian gooseberry	<i>Cactus pereskia</i>
Apple, Custard	<i>Annona reticulata</i>
Apple, Love	<i>Solanum</i>
Apple, Mad	<i>Solanum insanum</i>
Apple, Male balsam	<i>Momordica</i>
Apple, May ; or Duck's foot	<i>Podophyllum</i>
Apple, Pine ; or Ananas	<i>Bromelia ananas</i>
Apple, Purple	<i>Annona</i>
Apple, Soap	<i>Sapindus</i>
Apple, Sour	<i>Annona muricata</i>
Apple, Star	<i>Chrysophyllum</i>
Apple, Sugar,	<i>Annona</i>
Apple, Sweet	<i>Annona squamosa</i>
Apple, Thorn ; or Stramonium	<i>Datura stramonium</i>
Apple, Water	<i>Annona palustris</i>
Apricot	<i>Prunus armeniaca</i>
Arbor vitæ	<i>Thuia</i>
Arbor tristis ; or Sorrowful tree	<i>Nyctanthes arbor tristis</i>
Arbutus, Trailing	<i>Epigæa</i>
Arcel	<i>Lichen omphalodes</i>
Archangel ; or Dead nettle	<i>Lamium</i>
Archangel, Baum-leaved	<i>Melissa</i>
Archangel, Yellow	<i>Galeopsis</i>
Aria Theophrasti ; or White beam	<i>Cratægus aria</i>
Arnotta ; or Anotta	<i>Bixa orellana</i>
Arnuts	<i>Avena elatior</i>
Arrowhead	<i>Sagittaria</i>
Arrow-headed grass	<i>Triglochin</i>
Arrow-root, Indian	<i>Maranta</i>
Ase-smart ; or Water pepper	<i>(Perficaria) Polygonum hydropiper</i>
Artichoke	<i>Cynara scolymus</i>
Artichoke, Jerusalem	<i>Helianthus tuberosus</i>
Arum, African	<i>Calla</i>
Arum, floating	<i>Orontium</i>
Asarabacca,	<i>Asarum</i>
Ash, Common	<i>Fraxinus excelsior</i>
Ash, Mountain ; or Wicken, or Roan tree	<i>Sorbus aucuparia</i>
Ash, Poison ; or Varnish tree	<i>Rhus vernix</i>
Ash, Sweet ; or Ground ; or Goutwort	<i>Ægopodium podagraria</i> Aspar-

Asparagus, Common	Asparagus officinalis
Asparagus, Climbing	Medeola
Asp, or Aspen tree	Populus tremula
Asphodel	Asphodelus
Asphodel, African	Anthericum
After ; or Starwort	Aster
Avens ; or Herb bennet	Geum
Avocado ; or Alligator pear	Laurus, persea
Auricula ; or Bear's ear	Primula auricula
Auricula, Borage-leaved	Verbascum myconi
Awlwort ; or Rough-leaved	Subularia aquatica
Alysson	
Azarole	Cratægus
Azerita	Prunus

B

Balm of Gilead	Amyris gileadenfis
Balm of Gilead, false	Dracocephalum canariensis
Balsam	Impatiens
Balsam copaibi	Copaifera officinalis
Balsam of Canada	Pinus balsamea
Balsam of Peru	Myroxylon peruiferum
Balsam of Tolu	Toluifera balsamum
Balsam tree	Clusia
Balsam tree	Pistacia
Balsamine, female ; or Immor- tal eagle flower	Impatiens balsamina
Balsamine, yellow ; noli me tan- gere	Impatiens noli me tangere
Bambu cane	Aruado bambos
Banana, a species of Plantain tree	Musa sapientum
Banc-berries, or herb Christopher	Actæa spicata
Baniam tree	Ficus religiosa
Bark, true jesuit's	Cinchona officinalis
Bark, false jesuit's	Iva
Bark of Elutheria ; or Cascarilla	Croton cascarilla
Bark, Winter's	Wintera aromatica
Bardana ; or Burdock	Arctium lappa
Barley, common spring	Hordeum vulgare
Barren-wort	Epimedium alpinum
Bazil	Ocymum
Basil, field	Climopodium
Basil, American field	Monarda

Basil,

Basil, Syrian field	Ziziphora
Basil, stone	Thymus acinos
Basil, wild ; or mother of thyme	Thymus serpyllum
Bachelor's button ; Lychnis ; or Campion	Lychnis
Batata ; or Spanish potatoe	Convolvulus batatas
Baulm, common	Melissa officinalis
Baulm, base	Melittis melissophyllum
Baulm, Moldavian	Dracocephalum moldavica
Baulm, Molucca	Moluccella
Baulm, Indian ; or Oswego tea	Monarda didyma
Baulm, Turkey	Dracocephalum
Bay tree, common ; or laurel of the antients	Laurus nobilis
Bay, loblolly	Gordonia lasianthus
Bay, blue berried	Ligustrum
Bay, dwarf ; or spurge laurel	Daphne laureola
Bay, sweet-flowering	Magnolia glauca
Bead tree	Melia
Beam, white ; or Aria Theophrasti	Cratægus aria
Bean	Vicia faba
Bean, kidney of India ; or Soy	Dolichos soja
Bean, kidney or French	Phaseolus
Bean tree, kidney	Glycine frutescens
Bean tree of America	Erythrina
Bean tree, binding	Mimosa
Bean, caper	Zygophyllum
Bean, Egyptian ; or water lily	Nymphæa nelumbo
Bean, trefoil	Cytisus
Bean, trefoil, stinking	Anagyris foetida
Bear-berries ; or uva ursi	Arbutus uva ursi
Bear-bird	Convolvulus
Bear's breech	Acanthus
Bear's ear ; or auricula	Primula auricula
Bear's ear fanicle	Cortusa
Bear's foot ; or setter-wort	Helleborus foetidus
Beard, old man's ; or traveller's joy	Clematis vitalba
Beech	Fagus sylvatica
Beet	Beta
Bee-flower	Ophrys
Behen, white ; or spatling poppy	Cucubalus behen
Bell flower	Campanula
Bell, Canterbury	Campanula medium
Bell pepper	Capficum

Bella-donna; or deadly Nightshade	<i>Atropa belladonna</i>
Belvidere ; or summer Cypress	<i>Chenopodium scoparia</i>
Belly-ach weed	<i>Jatropha gossypifolia</i>
Benjamin tree	<i>Terminalia benzoin</i>
Benjamin tree	<i>Laurus benzoin</i>
Berberry, common ; or piper- ridge bush	<i>Berberis vulgaris</i>
Bermudiana	<i>Sisyrinchium bermudianum</i>
Betel	Piper betle
Betony	<i>Betonica officinalis</i>
Betony, Paul's	<i>Veronica officinalis</i>
Betony, water	<i>Scrophularia betonicifolia</i>
Big barley	<i>Hordeum hexastichon</i>
Bilberry ; or whortle berry	<i>Vaccinium myrtillus</i>
Bindweed	<i>Convolvulus</i>
Bindweed, black ; or black Bryony	<i>Tamus</i>
* Bindweed, rough	<i>Smilax</i>
Birch	<i>Betula alba</i>
Birch of Jamaica	<i>Bursera gummiifera</i>
Bird cherry ; or cherry laurel	<i>Prunus lauro-cerasus</i>
Bird's eye	<i>Primula farinosa</i>
Bird's foot	<i>Ornithopus</i>
Bird's foot trefoil ; or lamb toes	<i>Lotus corniculatus</i>
Bird's nest	<i>Monotropa</i>
Bird's nest	<i>Ophrys nides avis</i>
Bird's nest, purple	<i>Orchis abortiva</i>
Birth-wort	<i>Aristolochia</i>
Bishop's weed, common	<i>Ammi majus</i>
Bistort	<i>Polygonum bistorta</i>
Bitter-sweet	<i>Solanum dulcamara</i>
Bitter wood	<i>Quassia excelsa</i>
Bitter-wort	<i>Gentiana</i>
Black-berry ; or Bramble	<i>Rubus fruticosus</i>
Black Olive	<i>Bucida Buceras</i>
Bladder-wort ; or water milfoil	<i>Utricularia vulgaris</i>
Blattaria	<i>Verbaicum blattaria</i>
Blind man's ball	<i>Lycoperdon bovista</i>
Blinks	<i>Montia</i>
Blite ; or, strawberry spinach	<i>Blitum capitatum</i>
Blite, amaranth	<i>Amaranthus blitum</i>
Blood-flower ; or African tulip	<i>Hæmanthus</i>
Blood-wood ; or logwood	<i>Hæmatoxylon campechianum</i>
Blue-wort	<i>Rumex sanguineus</i>
Blue-bottle ; or blue-bonnet ; or Cyanus	<i>Centaurea cyanus</i>

Bog-bane; or marsh trefoil	<i>Menyanthes trifoliata</i>
Bogberry; or bogwort	<i>Vaccinium</i>
Bonace bark tree	<i>Daphne tinifolia</i>
Bonny of Carolina; or oily grain	<i>Sesamum orientale</i>
Borecole (a variety)	<i>Brassica</i>
Borage	<i>Borago</i>
Box	<i>Buxus sempervirens</i>
Box, African	<i>Myrsine africana</i>
Box, Low	<i>Polygala</i>
Boxthorn	<i>Lycium</i>
Bracken; or brakes	<i>Pteris</i>
Bramble; or Black-berry	<i>Rubus fruticosus</i>
Brank	<i>Polygonum</i>
Brank urfine; or Corinthian a-canthus	<i>Acanthus spinosus</i>
Brasiletto	<i>Cæsalpina</i>
Bread fruit	<i>Artocarpus integrifolia</i>
Bread nut	<i>Brosimum Alicastrum</i>
Bread, or Plantain tree	<i>Musa sapientum</i>
Break-stone; or saxifrage	<i>Saxifraga</i>
Break-stone parsley; or parsley piert	<i>Aphanes arvensis</i>
Briar-sweet; or eglantine	<i>Rosa eglanteria</i>
Briar, wild or hep	<i>Rosa arvensis</i>
Brimstone or sulphur-wort; or hog's fennel	<i>Peucedanum</i>
Bristol, flower of; or noneſuch	<i>Lychnis</i>
Broad leaf tree	<i>Terminalia latifolia</i>
Brocoli (a variety)	<i>Brassica</i>
Brooklime; or water speedwell	<i>Veronica beccabunga</i>
Broom, common besom	<i>Spartium scoparium</i>
Broom, African	<i>Aspalathus</i>
Broom, dyer's; or wood waxen	<i>Genista tinctoria</i>
Broom, dwarf or single seeded	<i>Genista</i>
Broom, rape	<i>Orobanche</i>
Broom, rape, with great purple flowers	<i>Lathræa</i>
Broom weed	<i>Corchorus siliquosus</i>
Brown Jolly	<i>Solanum melongena</i>
Brown-wort	<i>Scrophularia</i>
Brown-wort	<i>Prunella</i>
Bryony, white	<i>Bryony alba</i>
Bryony, black; or black hindweed	<i>Tamus communis</i>
Buck-bean, see bogbane	
Buck's horn, Plantain	<i>Plantago coronopifolia</i>

Buck's

Buck's horn, Warted	Cochlearia
Buckthorn, Common	Rhamnus catharticus
Buckthorn, Sea	Hippophae
Buck-wheat	Polygonum fagopyru
Buckee, Hottentot	Diosma
Bugle	Ajuga
Bugloss	Anchusa
Bugloss, small, wild; or Great goose grass; or German mad- wort	Asperugo procumbe
Bugloss, Viper's	Echium
Bullace tree, W. Indian	Chrysophyllum
Bullace tree	Prunus infinitia
Bully tree (Var)	Achras
Burdock; or Bardana	Arctium lappa
Burdock, Lesser	Xanthium
Burrbark	Triumfetta lappula
Bur marigold	Bidens
Burnet, Garden or Common	Poterium sanguisorba
Burnet, Greater wild	Sanguisorba
Burnet, saxifrage	Pimpinella saxifraga
Burning thorny plant	Euphorbia
Burn weed	Datura serot
Bur reed	Sparganium
Butcher's broom	Ruscus aculeatus
Butter bur	Tussilago petasites
Butter-cup; Golden-cup; or Crow-foot	Ranunculus
Butter-wort; or Yorkshire fa- nicle	Pinguicula
Button tree	Conocarpus erecta
Button weed	Spermacoce
Button wood	Cephalanthus

C

Cabbage, Common	Brassica oleracea
Cabbage, Dog's; or Dog's mer- cury	Theligonum cynocrambe
Cabbage, Sea	Crambe maritima
Cabbage, Turnep	Brassica rapa
Cabbage tree	Areca oleracea
Cabbage tree; or Foreign colt's foot	Cacalia kleinia
Cabbage-bark tree	Geoffraea inermis

Calabash	Cucurbita
Calabash ; or Gourd tree	Crescentia
Calaloo	Amaranthus
Calaloo, mountain	Phytolacca decandra
Calamint,	Melissa calamintha
Calamint : or Cat-mint, wild	Melissa nepeta
Calamint, Water	Mentha gentilis
Calamus aromaticus ; or Sweet flag, or rush	Acorus calamus
Calavances, or red Pease	Phaseolus sphærospermus
Caltrops	Tribulus
Caltrops, Water	Trapa natans
Camboge ; or Gamboge (a gum)	Cambogia gutta
Cammock ; or Petty whin ; or Rest harrow	Ononis
Campeachy wood ; or Logwood	Hæmatoxylon campechia- num
Camphor tree	Laurus camphora
Campion, Rose	Agrostetuma coronaria
Campion	Lychnis
Campion, viscous ; or Catchfly	Silene muscipula
Canary grass	Phalaris
Candle of the Indians	Rhizophora candel
Candy lion's foot	Catananche
Candy-tuft	Iberis umbellata
Candy-tuft, perennial	Iberis sempervirens
Candy-tuft tree	Iberis semperflorens
Cane bambu	Arundo bambos
Cane or shot, Indian	Carina indica
Cane or Reed	Arundo
Cane, Sugar	Saccharum
Canker berry	Solanum Bahamense
Caper bush	Capparis
Caraway ; or Carui	Carum Carui
Canella alba tree	Canella alba
Carduus benedictus	Centaurea benedicta
Cardoon	Cynara cardunculus
Cardinal flower ; or Water gla- diole	Lobelia cardinalis
Carica	Ficus carica
Carnation	Dianthus caryophyllus
Carnation, Spanish ; or Flower fence	Poinciana
Carnation tree ; or Foreign colt's-foot	Cacalia kleinia

Carob tree ; or St John's bread	Ceratonia filiqua
Carrot, Wild	Daucus
Carrot, Garden	Daucus carota
Carrot, Candy	Athamanta cretensis
Carrot, Deadly ; or Scoreking fennel	Thapsia
Carui ; or Caraway	Carum carui
Cascarilla ; or bark of Eleutheria	Croton cascarilla
Cassada ; or Cassava ; or Manihot	Jatropha manihot
Cassena , or Yapon	Ilex cassine
Cassia, purging	Cassia fistula
Cassia, horle	Cassia javanica
Cassia, Poet's	Osyris alba
Cassidony : or French lavender	Lavandula stoechas
Cassioberry bush	Cassine capensis
Catalpa	Bignonia, catalpa
Catchfly ; or Viscous campion	Silene muscipula
Catchfly ; Lobel's	Silene armeria
Catmint ; nep	Nepeta cataria
Catmint ; or Calamint, wild	Melissa nepeta
Cat's foot ; or Ground ivy	Glechoma hederacea
Cat's foot, Mountain	Gnaphalium
Cat's tail ; or Reed mace	Scorpiurus
Caterpillars	Typha
Cauliflower (a variety)	Brassica oleracea
Cayenne Pepper (Variety)	Capicum
Cedar, Red, Virginian	Juniperus virginiana
Cedar of Jamaica, base	Theobroma
Cedar tree of Jamaica	Cedrela odorata
Cedar, White	Cupressus
Cedar of Bermudas	Juniperus bermudiana
Cedar of Busaco	Cupressus
Cedar of Libanus	Pinus cedrus
Celandine, Wild	Bocconia frutescens
Celandine, common or greater	Chelidonium majus
Celandine, Lesser	Ranunculus
Celandine tree	Bocconia frutescens
Celeriac	Apium
Celery (a variety)	Apium graveolens
Cereus	Cactus
Centauray	Centaurea
Centauray, Lesser	Gentiana centaurea
Centauray, Yellow perfoliate	Chlora perfoliata
Cerafee	Momordica Charantia
Cetarach	Asplenium ceterach

Chamomile, common	<i>Anthemis nobilis</i>
Chamomile, Dwarf or Sea	<i>Matricaria chamomilla</i>
Champignon; or esculent Mush-room	<i>Agaricus campestris</i>
Char; or Sedge	<i>Carex</i>
Charity; Greek valerian; or Jacob's ladder	<i>Polemonium</i>
Charlock; or Ketlock	<i>Sinapis arvensis</i>
Charlock, White-flowered, with jointed pods	<i>Raphanus raphanistrum</i>
Chaste tree; or <i>Agnus castus</i>	<i>Vitex</i>
Cheese rennet; or Ladies bed straw	<i>Galium verum</i>
Cherry tree	<i>Prunus cerasus</i>
Cherry, Barbadoes	<i>Malpighia</i>
Cherry, Bird; or Cherry; or common laurel	<i>Prunus lauro-cerasus</i>
Cherry clammy (a Var)	<i>Cordia</i>
Cherry, Cornelian	<i>Cornus mascula</i>
Cherry, Dwarf; or Upright honeysuckle	<i>Lonicera coerulea</i>
Cherry, Hottentot	<i>Cassine maurocenia</i>
Cherry, Winter	<i>Physalis viscosa</i>
Cherry, Alpine	<i>Lonicera alpigena</i>
Chervil, Garden	<i>Scandix anthriscus</i>
Chervil, Wild	<i>Chærophylum</i>
Chestnut	<i>Fagus castanea</i>
Chestnut, Horse	<i>Æsculus hippo-castanum</i>
Chestnut, Indian rose	<i>Mesua ferrea</i>
Chiches; or Chick pea; or Garavances	<i>Cicer arietinum</i>
Chichling-vetch	<i>Lathyrus</i>
Chickweed	<i>Alfina</i>
Chickweed, African	<i>Mollugo verticillata</i>
Chickweed, Berry-bearing	<i>Cucubalus baccifera</i>
Chickweed, Great	<i>Stellaria</i>
Chickweed, Mountain	<i>Moehringia muscosa</i>
Chickweed, Mouse-ear	<i>Cerastium</i>
Chickweed, sea; or black saltwort	<i>Glaux maritima</i>
Chickweed, Small water	<i>Montia fontana</i>
China root	<i>Smilax china</i>
China rose	<i>Hibiscus rosa-sinensis</i>
Chinquapin	<i>Fagus</i>
Chocho vine	<i>Sicyos edulis</i>

Chocolate

Chocolate nut	<i>Theobroma cacao</i>
Christmas rose; or Black hel- lebores	<i>Helleborus niger</i>
Christmas gambol	<i>Convolvulus charantia</i>
Christopher, Herb	<i>Actæa</i>
Christ's thorn	<i>Rhamnus paliurus</i>
Chrysanthemum, Base	<i>Silphium</i>
Chrysanthemum, Hard-seeded	<i>Osteospermum</i>
Ciboules: or Welsh onion	<i>Allium</i>
Cichory; or Succory	<i>Cichorium</i>
Cicuta; or Water-hemlock	<i>Cicuta virofa</i>
Cicely; Sweet; Myrrhis; or Wild myrrh	<i>Scandix odorata</i>
Cinnamon tree	<i>Laurus cinnamomum</i>
Cinnamon, White	<i>Laurus</i>
Cinnamon, Base	<i>Laurus cassia</i>
Cinquefoil	<i>Potentilla</i>
Cinquefoil, Marsh	<i>Comarum palustre</i>
Cinquefoil, Shrub	<i>Potentilla fruticosa</i>
Cistus, Gum: or Rock rose	<i>Cistus</i>
Cistus, Marsh; or Wild rosemary	<i>Ledum palustre</i>
Cistus, Lesser marsh; or Base heath	<i>Andromeda</i>
Cistus, Nettle-leaved	<i>Turnera cistoides</i>
Citron	<i>Citrus</i>
Citrus; or Water-melon	<i>Cucurbita citrullus</i>
Cives; or Chives	<i>Allium</i>
Clary	<i>Salvia selarea</i>
Clary, Pyrenean	<i>Horminum</i>
Clivers; Goosegrass; or Hairiff	<i>Galium aparine</i>
Cloud-berry	<i>Rubus chamaemorus</i>
Clove July flower	<i>Dianthus caryophyllus</i>
Clove tree	<i>Caryophyllus aromaticus</i>
Cloven berry bush	<i>Celtis occidentalis</i>
Clover, Common	<i>Trifolium pratense</i>
Clover, English red; or Cow-grass	<i>Trifolium alpestre</i>
Clover, White; or Honey-suckle grass	<i>Trifolium repens</i>
Cocco root (variety)	<i>Arum</i>
Cocculus (Indian berry)	<i>Menispermum cocculus</i>
Cockscomb; Rattle; or Loufe wort	<i>Pedicularis palustris</i>
Cockscomb amaranth	<i>Celosia cristata</i>
Cockscomb; or Yellow rattle	<i>Rhinanthus crista-galli</i>

Cock-

Cockhead ; or Saintfoin	Hedysarum onobrychis
Cockle ; or Popple	Agrostemma githago
Cocoa nut	Cocos nucifera
Cocoa Plum	Chrylobalanus Icaco
Codlings and cream	Epilobium hirsutum
Coffee, Arabian	Coffea, arabica
Coffee, W. Indian	Coffea occidentalis
Colewort (a variety)	Brassica oleracea
Colewort; Sea	Crambe maritima
Colewort, Sea	Convolvulus soldanella
Colocasia	Arum colocasia
Coloquintida ; or Bitter apple	Cucumis colocynthis
Colt's-foot	Tussilago anandria
Colt's-foot, Foreign	Caecalia
Colt's-foot, Foreign, or Cab-	Caecalia Eleclia
bage, or carnation tree	Aquilegia
Columbine	Thalictrum aquilegifolium
Columbine, Feathered ; or Mea-	Coronilla
dow rue	Symphytum
Colutea, Jointed-podded	Ajuga
Comfrey ; or Confound, greater	Prunella
Confound, Middle ; or Bugle	Bellis
Confound, Lesser	Tormentilla
Confound, Least ; or Dally	Solidago
Confound, Red	Senecio jarracenicus
Confound, Saracen's ; or Wound-	Comarum
wort	Delphinium consolida
Confound, True Saracen's	Cistus
Confound, Marsh	Dorstenia contrayerva
Confound, Royal ; or Earkspur	Passiflora
Confound, Golden	Ipomœa quamoclit
Contrayerva	Erythrina
Contrayerva of Hermantes	Dentaria
Convolvulus, Scarlet, or Qua-	Coriandrum sativum
moclit	Quercus fuber
Coral tree	Annona palustris
Coral-wort ; or Tooth-wort	Holcus forghum
Coriander	Zea mays
Cork tree	
Cork wood	
Corn, Guinea	
Corn, Indian ; or Mays	

* Confound, (consolida) a name formerly given to certain volunery plants, from their power of conglutinating and consolidating the parts; as symphytum (comfrey) was called consolida major, or greater confound, &c.

Corn flag	Gladiolus
Corn marigold ; or Guills	Chrysanthemum segetum
Corn rose ; or Corn poppy	Papaver dubium
Corn salad ; or Lamb's lettuce	Valeriana locusta
Cornell ; or Dog berry	Cornus sanguinea
Cornelian cherry	Cornus maicula
Costmary ; or Alecost	Tanacetum Balsamita
Coronopus	Cochlearia coronopus
Cotton plant	Gossypium
Cotton, Lavender	Santolina
Cotton, tree, Silk	Ochroma lagopus
Cotton tree, large	Bombax ceiba
Cotton grass	Eriophorum
Cotton weed ; or Cudweed	Filago (Gnaphalium)
Courbaril ; or Locust tree	Hymenaea courbaril
Cow-grass ; or English red clover	Trifolium alpestre
Cow-quakes ; or Quake grass	Briza
Cow-itch	Dolichos pruriens
Cowslip (a variety)	Primula veris officinalis
Cowslip, American ; or Meadia	Dodecatheon Meadia
Cowslip or sage, Jerusalem ; or	Pulmonaria officinalis
Lungwort	
Cowslip, Mountain ; or Lungwort	Pulmonaria
Cow-weed	Chærophyllum
Crab tree ; or Apple tree	Pyrus malus
Crake or Crow berries ; or Black-berried heath	Empetrum nigrum
Cranberries ; or Bog, Moor, or Whortle berries	Vaccinium oxycoccos
Crane's bill	Geranium
Creepcr or Ivy, Virginian ; or	Hedera quinquefolia
Five-leaved Canada vine	
Cress, Garden	Lepidium sativum
Cress, Virginian	Lepidium virginicum
Cress, Indian ; or Nasturtion	Tropæolum majus
Cress, Sciatia	Iberis
Cress, Spanish	Vella
Cress, Swine's	Cochlearia
Cress, Wall ; or Tower mustard	Turritis
Cress, Warted	Cochlearia
Cress, Water	Sisymbrium nasturtium
Cress, Winter	Erysimum barbarea
Cross, Jerusalem	Lychnis
Cross, Knight's	Lychnis

Cross, Scarlet	Lychnis
Crosswort	Valantia cruciata
Crocus ; or Saffron	Crocus
Crow or Crake berries ; or Black-berried heath	Enispetrum nigrum
Crow-foot : Golden cup ; or Butter cup	Ranunculus
Crow-silk	Conserva rivularis
Crown imperial	Fritillaria imperialis
Cubebs	Piper cubeba
Cuckow flower ; or Lady's smock	Cardamine pratensis
Cuckow flower ; or ragged Robin	Lychnis flos cuculi
Cuckow pint	Arum maculatum
Cucumber	Cucumis sativus
Cucumber, Asses, spurting, or wild	Momordica elaterium
Cucumber, Egyptian	Momordica
Cucumber, serpent	Trichosanthes anguina
Cucumber, single-seeded	Sicyos
Cucumber, small creeping	Melothria pendula
Cudweed ; or cotton weed	Gnaphalium (filago)
Cudweed, base	Micropus supinus
Cullions	Orchis
Cullions, soldier's	Orchis pyramidalis
Cumin	Cuminum cyminum
Cumin, base or wild	Lagoecia cuminoides
Currant	Ribes
Currant-leaved Virginia gelder rose	Spiræa opulifolia
Cushion, lady's	Saxifraga hypnoides
Cushion, sea ; sea pink ; or thrift	Statice
Custard apple	Annona squamosa
Cypress	Cupressus
Cypress, Summer ; or Belvedere	Chenopodium scoparia
Cyclamen ; or sow-bread	Cyclamen
Cyanus ; or blue-bottle	Centaurea cyanus

D

Daffodil	Narcissus
Daffodil, sea ; or lesser white squill	Pancratium maritimum
Daisy, common	Bellis perennis
Daisy, blue or globe	Globularia

Daisy,

Daisy, greater; or ox eye	Chrysanthemum leucanthemum
Daisy, middle	Doronicum bellidiflorum
Daisy, Michaelmas; or Aster	Aster tradescantia
Damson tree	Prunus
Damson tree, W. Indian	Chrysophyllum glabrum
Damson, bitter	Quassia simaruba
Dandelion, common	Leontodon taraxacum
Dane wort; wall wort; or dwarf elder	Sambucus ebulus
Darnel	Lolium
Date or dactyl tree; or greater palm	Phoenix dactylifera
Devil in a bush; or fennel flower	Nigella
Devil's bit	Scabiosa succisa
Devil's bit, yellow	Leontodon autumnale
Dewberry bush	Rubus cœsius
Dyer's weed; or wild woad	Reseda luteola
Dyer's weed; or dyer's broom	Genista tinctoria
Dill	Anethum graveolens
Dittander; or pepper-wort	Lepidium
Dittany, white; or Fraxinella	Dictamnus albus
Dittany of Crete	Origanum creticum
Dittany, base	Marrubium acetabulosum
Dock	Rumex
Dr. Tinker's weed; or Fever root; or false ipecacuanha	Triosteum perfoliatum
Dodder, European	Cuscuta europea
Dodder of thyme	Cuscuta epithymum
Dog's bane	Asclepias
Dog's bane, base	Cynanchum
Dog-berry; cornel; or gattertree	Cornus sanguinea
Dog-stones; or satyrion	Orchis
Dogwood of Jamaica	Piscidia erythrina
Dog's-tooth violet	Erythronium dens-canis
Dorycnium of Montalier	Convolvulus dorycnium
Double tongue; or horse tongue	Ruscus hypoglossum
Dove's foot	Geranium
Dragons	Dracontium
Dragon's spotted	Arum dracontium
Dragon's head	Draccephalum
Dragon wort; or tarragon	Artemisia dracunculus
Dropwort	Spiræa Filipendula

Dropwort, hemlock	<i>Oenanthe cncata</i>
Dropwort, water	<i>Oenanthe</i>
Duck meet	<i>Lemna</i>
Duck-meat, starry ; or star grass	<i>Callitriche</i>
Duck's foot ; or May apple	<i>Podophyllum</i>
Dulse	<i>Fucus palmatus</i>
Dwale ; or deadly nightshade	<i>Atropa bella-donna</i>

E

Ebony	<i>Ebenus cretica</i>
Ebony, false	<i>Poinciana</i>
Ebony of the Alps ; or laburnum	<i>Cytisus laburnum</i>
Ebony, mountain	<i>Bauhinia</i>
Edders	<i>Arum peregrinum</i>
Egg plant	<i>Solanum melongena</i>
Eglantine ; or sweet briar	<i>Rosa eglanteria</i>
Elder tree	<i>Sambucus nigra</i>
Elder, dwarf ; or dancwort	<i>Sambucus ebulus</i>
Elder, marsh	<i>Viburnum opulus</i>
Elecampane ; or yellow starwort	<i>Inula helenium</i>
Elecampane, base	<i>Helenium</i>
Elemi tree, gum	<i>Amyris elemifera</i>
Elephant's foot	<i>Elephantopus</i>
Elephant's head ; or yellow rattle	<i>Rhinanthus</i>
Elichrysum, base Ethiopian	<i>Stoebe</i>
Eller ; or alder	<i>Betula alnus</i>
Elm, common	<i>Ulmus campestris</i>
Elm, witch	<i>Ulmus</i>
Endive	<i>Cichorium endivia</i>
Eryngo ; or sea holly	<i>Eryngium maritimum</i>
Eschalot	<i>Allium cepa</i>
Evergreen	<i>Aizoon</i>
Everlasting, or eternal flower	<i>Gnaphalium</i>
Everlasting, or eternal flower	<i>Xeranthemum</i>
Everlasting, or globe amaranth	<i>Gomphrena</i>
Euonymus	<i>Euonymus</i>
Euonymus, base	<i>Kiggelaria africana</i>
Euonymus, base ; or staff tree	<i>Celastrus</i>
Eye-bright	<i>Euphrasia</i>
Elaterium ; or spurting cucumber	<i>Momordica elaterium</i>

F

False Ipecacuan of Jamaica	<i>Asclepias curassavica</i>
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Fart-

Farting tree; Jamaica walnut; or sandbox tree	Hura crepitans
Fat hen; or wild orach	Chenopodium vulvaria
Felwort; or gentian	Gentiana
Felon-wort	Solanum
Fennel	Anethum fœniculum
Fennel, horse	Seseli hippomarathrus
Fennel, hog's; or sulphurwort	Peucedanum
Fennel, scorching; or deadly carrot	Thapsia
Fennel, sea; or lampshire	Crithmum maritimum
Fennel flower; or devil in a bush	Nigella
Fennel flower of Crete	Garidella nigellastrum
Fennel, giant	Ferula
Fenugreek, common	Trigonella fœnum-græcum
Fern, common male	Polypodium filix mas
Fern, common female	Polypodium filix femina
Fern, flowering; or Osmund royal	Osmunda
Fern, common; or true mules	Asplenium
Fern, mules or moon; or mulewort	Hemionitis
Fern, sweet	Scandix
Feverfew, common	Matricaria parthenium
Feverfew, base; or wild worm wood	Parthenium hysterophorus
Fever root; Dr. Tinker's weed or false ipecacuanha	Triosteum perfoliatum
Fever weed	Eryngium fœtidum
Fiddle dock	Rumex pulcher
Fiddle wood	Citharexylon
Ficoides; or fig marigold	Mesembryanthemum
Ficoides, diamond; or Ice plant	Mesembryanthemum crystallinum
Fig, common	Ficus carica
Fig, Indian	Cactus opuntia; or cactus
Fig, Internal; or Prickly poppy	Argemone
Fig, Pharaoh's or True sycamore	Ficus sycomorus
Fig, Pharaoh's	Musa
Fig, Cochineel; or Nopal	Cactus cochenillifer
Figwort	Scrophularia
Filbert nut	Corylus avellana
Fingrido, Prickly	Pisonia aculeata
Finochia; or Azorean fennel	Anethum graveolens

Fir	Pinus abies
Fir-moss, Upright	Lycopodium
Flag	Iris
Flag, Yellow water	Iris pseudacorus
Flag, Corn	Gladiolus
Flag, Sweet ; or Calamus aromaticus	Acorus calamus
Flammula Jovis	Clematis flammula
Flax, or Lint, Common	Linum usitatissimum
Flax, Carolina	Polypremum procumbens
Flax, Toad	Antirrhinum linaria
Flea-bane, Greater	Conyza
Flea-bane, Lesser blue	Erigeron acre
Flea-bane, Marsh	Inula pulicaria
Flea-bane, Middle	Inula dysenterica
Flea-bane, Shrubby African	Tarhonanthus
Flea-wort	Plantago psyllium
Flix-weed	Sisymbrium sophia
Flower of Constantinople	Lychnis
Flower-gentle ; or Amaranth	Amaranthus
Flower of an hour	Hibiscus trionum
Flower de luce	Iris
Flower-fence of Barbadoes ; or Spanish carnation	Poinciana pulcherrima
Flower-fence, base	Adenantha pavonia
Fluellin ; or Speedwell	Veronica
Fly-bane ; or Catch-fly	Silene muscipula
Four o'clock flower	Mirabilis jalapa
Foxglove	Digitalis purpurea
Fraxinella ; or White dittany	Dictamnus albus
French oak	Bignonia catalpa
Friar's cowl	Arum arifarum
Fringe or Snowdrop tree	Chionanthes
Fritillary	Fritillaria
Fritillary, Cock's-comb ; or African swallow wort ; or Fritillaria crassa	Stapelia variegata
Frog's-bit	Hydrocharis morsus-ranae
Fumatory, Common	Fumaria officinalis
Furze ; Gorse ; or Whin	Ulex europaeus
Fustic tree	Morus tinctoria
Gale ; or Sweet gale	G
	Myrica gale
	Galan-

Galangale, Larger	Cyperus
Galangale, Lesser	Kæmpferia galanga
Gamboge; or Camboge	Cambogia gutta
Garavances, Spanish; or Chich pea	Cicer arietinum
Garlic	Allium sativum
Garlic, Crow or Wild	Allium vineale
Garlic pear	Cratæva tapia
Gatter tree; or Dogwood	Cornus
Genip tree	Melicocca bijuga
Gentian; or Fellwort, Yellow	Gentiana lutea
Gentian, Base	Sarothra gentianoides
Gentian, Marsh	Swertia perennis
Gentianella	Gentiana acaulis
Gerard, Herb; or Goutwort	Ægopodium podagraria
Germander	Teucrium chamædrys
Germander, Rock	Veronica teucrium
Gill; or ground ivy	Glechoma hederacea
Gilly flower, see July flower	
Ginger	Amomum zinziber
Ginseng; or Ninzin	Panax quinquefolia
Gladiole, Water	Lobelia Dortmanna
Gladiole, Water; or flowering rush	Butomus umbellatus
Gladiole, Water; or Cardinal flower	Lobelia cardinalis
Gladwin, Stinking	Iris foetidissima
Glass-wort; or Kali	Salsola
Glass-wort, jointed; or Kali	Salicornia
Glass-wort, Berry-bearing	Anabasis
Glass-wort, Shrubby; or Stone- crop-tree	Chenopodium
Globe-flower	Sphæranthus
Goat's-beard	Tragopogon
Goat's-beard, garden; or Salsafy	Tragopogon porrifolium
Goat's Rue	Galega cinerea
Goat's-stones, Greater	Satyrium hircinum
Goat's-stones, Lesser	Orchis
Goat's-thorn; or Tragacanth	Astragalus tragacantha
Gold of pleasure	Myagrum sativum
Golden-cup' Butter-cup; or Crow-foot	Ranunculus
Goldyllocks	Chrysocoma
Goldyllocks	Gnaphalium

Good

Good Henry ; All-good ; or English mercury	<i>Chenopodium bonus Hen- ricus</i>
Gooseberry	<i>Ribes grossularia</i>
Gooseberry, American	<i>Melastoma grossularioides</i>
Gooseberry, W. Indian ; or blad apple	<i>Cactus pereskia</i>
Goose-foot ; or Wild orach	<i>Chenopodium vulvaria</i>
Goose-grafs ; Clivers ; or Hairiff	<i>Galium aperine</i>
Goosegrafs ; or Silver-weed	<i>Potentilla anserina</i>
Goosegrafs, great ; Small wild bugloss ; or German madwort	<i>Asperugo procumbens</i>
Goose-tongue	<i>Achillea</i>
Go to bed at noon ; or Goat's- beard	<i>Tragopogon pratense</i>
Gorse ; Furze ; or Whin	<i>Ulex europæus</i>
Gourd	<i>Cucurbita</i>
Gourd ; or Calabash tree	<i>Crescentia</i>
Gourd, Sow of Æthopia ; or Monkey's bread	<i>Adansonia digitata</i>
Gourd, Jonas's	
Goutwort ; or Herb Gerrard ; or Wild angelica	<i>Ægopodium podagraria</i>
Gowan	<i>Bellis</i>
Grace, Herb of ; or Rue	<i>Ruta graveolens</i>
Grains of Paradise	<i>Amomum granum Paradisi</i>
Grain, Oily ; or Bonny	<i>Sesamum orientale</i>
Grain, Scarlet ; or Kermes oak	<i>Quercus coccifera</i>
Grain, Scarlet ; or Cochineel	<i>Cactus cochinillifer</i>
Granadilla	<i>Passiflora quadrangularis</i>
Grape or Vine tree	<i>Vitis</i>
Grape, Sea ; or Shrubby Horse- tail	<i>Ephedra</i>
Grape, Sea-side, or Mangrove	<i>Coccoloba uvifera</i>
Grass, Arrow-headed	<i>Triglochin</i>
Grass, Broom	<i>Bromus</i>
Grass, Cat's-tail	<i>Phleum</i>
Grass, Cock's-foot	<i>Dactylis</i>
Grass, Canary	<i>Phalaris</i>
Grass, Cotton	<i>Eriophorum</i>
Grass, Darnel ; or Rye or Ray grass ; or Bent	<i>Lolium tenue</i>
Grass, Dog's, or Couch, or Quick or Twitch	<i>Agrostis canina</i>
Grass, Dog's-tail	<i>Cynosurus</i>

Grass,

Grass, Feather	Stipa
Grass, Fescue	Festuca
Grass, Fox-tail	Alopecurus
Grass, Guinea	Panicum polygamum
Grass, Hair	Arra
Grass, Lyme	Elymus
Grass, Mat	Nardus
Grass, Meadow	Poa
Grass, Millet	Milium
Grass, Oat	Arrida
Grass, Panic	Panicum
Grass of Parnassus	Parnassia palustris
Grass, Pepper	Phylaria globulifera
Grass, Poley	Lythrum
Grass, Purple	Medicago polymorpha (arabica)
Grass, Quake ; or Cow-quakes	Briza
Grass, Rope or Melle	Melica
Grass, Rush	Schoenus
Grass, Sedge ; or Cyperus grass	Carex
Grass, Soft	Eglops
Grass, Star	Callitriche
Grass, Sea	Ruppia maritima
Grass, Scurvy	Cochlearia officinalis
Grass, Timothy	Phleum
Grass, Toad	Bufoia tenuifolia
Grass, Vernal	Anthoxanthum
Grass, Wrack	Zostera
Grass, Warm	Spigelia anthelmia
Gravel-bind	Convolvulus
Green-heart	Laurus chloroxylum
Green-weed	Genista
Green-sauce ; or Sorrel	Rumex acetosa
Grimthe collier	Hieracium aurantiacum
Gromwel	Lithospermum
Gromwel, German	Stellera
Groundfel	Senecio
Groundfel, Bolonian	Erigeron boloniense
Groundfel tree ; or Plowman's spikenard	Baccharis
Groundfel tree, with a ficoides leaf	Catalia ficoides
Guava ; or Guayava ; or Bay plum	Psidium
Guile ; or Corn marigold	Chrysanthemum segetum

Guinea-corn
Gum succory
Gum-tree

Holcus forghum
Chondrilla juncea
Hippomane biglandulosa

H

Hag-berries	Prunus padus
Hag-taper ; or White mullein	Verbascum thapsus
Hairbells	Hyacinthus non scriptus
Hairriff ; Clivers ; or Goosegrafs	Galium aparine
Halimus ; or Shrubby sea orach	Atriplex halimus
Hare's-ear	Bupleurum tenuissimum
Hare's-ear, base shrubby ; or Simpla nobla	Phyllis nobla
Hare's-lettuce ; or Sowthistle	Sonchus
Hard-head ; or Knapweed	Centaurea jacea
Hart's-tongue	Asplenium scolopendrium
Hart-wort, French ; or Wild spignel	Seseli
Hart-wort of Crete	Tordylium
Hart-wort, Shrubby	Bupleurum fruticosum
Harmel ; or Wild Assyrian rue	Peganum harmala
Hawkweed	Hieraceum
Hawkweed, Base	Crepis
Hawkweed, Trailing crooked seeded ; or Yellow eye	Hyoseris
Hawkweed, Woolly ; or Downy sowthistle	Andryala
Haw-thorn ; or White thorn	Crataegus oxyacantha
Haw-thorn, Black American	Viburnum prunifolium
Hay, Burgundian ; or Lucern	Medicago sativa
Hay, camels ; or Sweet rush	Andropogon schoenanthus
Hazel nut	Corylus avellana
Hazel witch, Virginian	Hamamelis virginica
Hazel witch ; or Hop hornbeam	Carpinus ostrya
Heart's-ease ; or Pansy	Viola tricolor
Heart-feed	Cardiospermum orindum
Heath ; or Ling	Erica
Heath, Base ; or Lesser marsh cistus	Andromeda
Heath, Black-berried : or Crow or Crake-berries	Empetrum nigrum
Heath, Mountain	Saxifraga nivalis
Heath, Low pine	Coris monspeliensis
Heath peas ; or bitter vetch	Orobus

Heath,

Heath, Sea	Frankenia
Hedge-hog trefoil	Medicago polymorpha (in- tertexa)
Hellebore	Helleborus
Hellebore, Black ; or Christmas rose	Helleborus niger
Hellebore, Fennel-leaved black ; or perennial Adonis	Adonis
Hellebore, White	Veratrum album
Hellebore, Base	Limodorum
Helleborine ; or Base Hellebore	Serapias
Helmet-flower ; or Monk's- hood ; or Wolf's-bane	Aconitum napellus
Hemlock, Common	Conium maculatum
Hemlock, Great broad-leaved base	Ligusticum peloponense
Hemlock, Lesser	Æthusa
Hemlock, Water	Cicuta virofa
Hemlock, Water dropwort	Oenanthe crocata
Hemp	Cannabis sativa
Hemp, Base	Datisca cannabina
Hemp, Base ; or Nettle hemp	Galeopsis
Hemp agrimony	Eupatorium cannabinum
Hemp agrimony, Base	Ageratum
Hemp agrimony, Naked-headed Indian	Verbena
Hemp agrimony, Water	Bidens
Hemp, Virginian	Acnida cannabina
Hen-bane ; or Hog-bean	Hyoscyamus niger
Henbane, Yellow ; or Tobacco	Nicotiana tabacum
Hen-weed, Guinea	Petiveria alliacea
Hepatica ; or Noble liverwort	Anemone hepatica
Hep or Hip tree ; or Wild briar	Rosa arvensis
Herb-bane	Orobanche
Herb-bane, Great purple	Lathræa
Herb-bennet ; or Avens	Geum
Herb-Christopher ; or Bane- berries	Actæa
Herb-Gerrard : or Goutwort	Egopodium podagraria
Herb of grace ; or Rue	Ruta
Herb-mastick ; or Mastick thyme	Satureia thymbra
Herb-Paris ; True love ; or One- berry	Paris quadrifolia

Herb-Paris of Canada ; or	Trillium
Three-leaved nightshade	
Herb-Robert	Geranium robertianum
Herb-Trinity ; or Pansy	Viola tricolor
Herb-twopence ; or Moneywort	Lyfimachia nummularia
Herb-impious ; or Cudweed	Filago montana
Herb, Willow ; or French willow	Epilobium
Herb, Willow ; or Purple loose-	Lythrum
strife	
Herb-Willow ; or Loofestrise	Lyfimachia ephemerum
Hercules's club	Zanthoxylum clava Herculis
Hernodactyl ; or Snake's head	Iris tuberosa
Iris	
Hicccory nut	Juglans
Hig-taper ; White mullein ; or	Verbascum thapsus
Cows lungwort	
Hog-bean ; or Hen-bane	Hyoscyamus
Hog-gum-tree	Rhus metopium
Hog-weed-American	Boerhaavia
Hollow-root ; or Tuberous	Adoxa moschatellina
moschatel	
Holly, Common	Ilex aquifolium
Holly, Dahoon ; or Paraguay tea	Ilex cassine
Holly, Knee ; or Butcher's broom	Ruscus aculeatus
Holly, Sea or Eringo	Eringium maritimum
Hollyhock ; or Rose mallow	Alcea rosea
Honesty, Moonwort ; or Sattin	Lunaria
flower	
Honewort ; or Corn Parsley	Sison fegetum
Honey flower	Melianthus
Honey locust ; or Three-thorn-	Gleditsia triacanthos
ed acacia	
Honeyfuckle	Lonicera
Honeyfuckle, upright, with red	Lonicera alpigena
berries ; or Dwarf alpine cherry	
Honeyfuckle, African fly	Halleria lucida
Honeyfuckle, American upright	Azalea
Honeyfuckle, French	Hedysarum
Honeyfuckle grass ; or White	Trifolium repens
clover	
Honeyfuckle, Jamaica	Bauhinia divaricata
Honeywort	Cerithe
Hop	Humulus lupulus
Hop hornbeam ; or witch hazel	Carpinus ostrya
Horehound, common	Marrubium vulgare

Hore-

Horehound, base	Stachys
Horehound, base ; or ironwort	Sideritis
Horehound, black	Ballota nigra
Horehound, water	Lycopus
Hornbeam	Carpinus betulus
Hornwort, common	Ceratophyllum demersum
Horsetail	Equisetum
Horsetail shrubby ; or sea grape	Ephedra
Horsetongue ; or double tongue	Ruscus hypoglossum
Hound's-tongue	Cynoglossum
Houseleek ; or fengreen	Sempervivum
Houseleek ; lesser	Sedum
Houseleek, small annual	Tillæa
Houseleek, water, of Egypt	Pistia stratiotes
Humming bird tree	Chelone
Hyacinth	Hyacinthus
Hyacinth, African blue umbellated	Crinum africanum
Hyacinth, grape	Hyacinthus muscari
Hyacinth, lily	Scilla lilio-hyacinthus
Hyacinth, Peruvian	Scilla peruviana
Hyacinth, starry	Scilla amœna
Hyssop, common	Hyssopus officinalis
Hyssop, hedge	Gratiola officinalis
Hyssop, mountain	Thymbra
Hypericum frutex	Spiræa hypericifolia

I

Iacinth, or hyacinth	Hyacinthus
Jack in a box	Hernandia sonora
Jack by the hedge ; or sauce alone	Erysimum
Jacob's-ladder ; Greek valerian ; or Charity	Polemonium
Jalap	Convolvulus jalapa
Jalap, white ; or mechoacanna	Convolvulus
Jasmine	Jasminum
Jasmine, Arabian ; or sambac	Nyctanthes sambac
Jasmine, base	Cestrum
Jasmine, cape	Gardenia florida
Jasmine, African ilex-leaved	Lantana africana
Jasmine, French	Asclepias gigantea
Jasmine, fennel-leaved	Ipomoea quamoclit
Jasmine, Persian	Syringa persica
Jasmine, red	Plumeria rubra
Jasmine, scarlet ; or trumpet flower	Bignonia
Jasmine, wild	Ixora americana

Jas-

Jasmine, yellow	<i>Bignonia semper virens</i>
Ice plant ; or diamond ficoides	<i>Mesembryanthemum crystallinum</i>
Jerusalem-thorn	<i>Parkinsonia aculeata</i>
Jew's-ear	<i>Peziza auricula</i>
Immortal flower	<i>Gomphrena</i>
Immortal eagle flower ; or female balsamine	<i>Impatiens balsamina</i>
Indian arrow-root	<i>Maranta arundinacea</i>
Indian kale	<i>Arum esculentum</i>
Indian pagod tree	<i>Ficus benghalensis</i>
Indian shot ; or cane	<i>Canna indica</i>
Indian berry, cocculus	<i>Menispermum coccus</i>
Indigo, common	<i>Indigofera anil, and tinctoria</i>
Indigo, base ; or juniper's beard of America	<i>Amorpha fruticosa</i>
Indigo-berry	<i>Randia aculeata</i>
Job's tears	<i>Coix lacryma</i>
Johnsonia	<i>Callicarpa</i>
Jonquil	<i>Narcissus jonquilla</i>
Ipecacuana	<i>Psychotria emetica</i>
Ipecacuana, base	<i>Asclepias curassavica</i>
Ipecacuana, false ; fever root ; or Dr Tinker's weed	<i>Triosteum perfoliatum</i>
Iris, calcedonian	<i>Iris fusiana</i>
Iris, snake's-head ; or hermodactyl	<i>Iris tuberosa</i>
Iris, uvaria	<i>Aletris uvaria</i>
Iron-wood	<i>Sideroxylum</i>
Ironwort ; or base horehound	<i>Sideritis</i>
Judas tree, (see red bud tree)	<i>Cercis filiquastrum</i>
Jujube tree	<i>Rhamnus jujuba</i>
July-flower, Clove	<i>Dianthus caryophyllus</i>
July-flower, Queen's ; Rocket ; or Dame's violet	<i>Hesperis</i>
July-flower, Stock	<i>Cheiranthus</i>
Junctianella, see Gentianella	
Junquil see Jonquil	
Juniper	<i>Juniperus</i>
Juniper's beard ; or silver bush	<i>Anthyllis barba jovis</i>
Juniper's beard, American ; or Base Indigo	<i>Amorpha fruticosa</i>
Juniper's distaff	<i>Salvia</i>
Ivy, common	<i>Hedera helix</i>
Ivy, Bindweed-leaved	<i>Menispermum</i>
Ivy, Ground ; Gill ; Alehcof ; Turn-hoof ; or Cat's foot	<i>Glechoma hederace</i>

Ivy tree ; or Dwarf laurel of America

Kalmia

Ivy ; or Creeper of Virginia

Hedera quinquefolia

K

Kale, or Cabbage, sea

Crambe maritima

Kali ; or Glasswort

Salsola

Kali, Egyptian

Mesembryanthemum nodiflorum

Kali, Sal ; Alkali ; or jointed glasswort

Salicornia

Kelp

Salicornia

Kex

Sium

Kedlock ; or Charlock

Sinapis arvensis

Kermes, Oak

Quercus coccifera

Kidney-wort

Saxifraga

King's spear ; Aaron's rod ; or Alphodel

Asphodelus

Kleinia ; or Colt's foot

Cacalia

Knapweed ; Matfellow ; or Hard-head

Centaurea jacea

Knapweed, Thorny

Centaurea

Knawel

Scleranthus

Knee holm ; Knee holly ; or Butcher's broom

Ruscus

Knot berries

Rubus

Knot-grafs

Polygonum aviculare

Knot-grafs, Sea

Polygonum maritimum

Knot-grafs, German

Scleranthus

Knot-grafs, Mountain

Illecebrum

Knot-grafs, Verticillate

Illecebrum verticillatum

L

Laburnum ; Ebony of the Alps ; Cytifus laburnum or Trefoil tree

Lace bark

Daphne lagetto

Ladder, Jacob's ; Greek valerian ; or Charity

Polemonium

Lady's bedftraw ; or Cheefe rennet

Galium verum

Lady's bower

Clematis

Lady's comb ; Venus's comb ; or Shepherd's needle

Scandix pecten

Lady's cushion

Saxifraga hypnoides

Lady's finger ; or Kidney vetch

Anthyllis vulneraria

Lady's

Lady's mantle, common	<i>Alchemilla vulgaris</i>
Lady's seal	<i>Tamus</i>
Lady's slipper	<i>Cypripedium calceolus</i>
Lady's smock ; or Cuckow flower	<i>Cardamine pratensis</i>
Lady's traces, Treble	<i>Ophrys spiralis</i>
Lake-weed	<i>Polygonum</i>
Lagetto, or Lace-bark	<i>Daphne Lagetto</i>
Lamb's lettuce ; or Corn salad	<i>Valeriana locusta</i>
Lamb-toe , or Bird's-foot trefoil	<i>Lotus ornithopodioides</i>
Larch tree	<i>Pinus larix</i>
Lark-heel ; or Lark spur	<i>Delphinium</i>
Lark-heel, Bee	<i>Delphinium elatum</i>
Lafer-wort ; or Sermountain	<i>Laferpitium</i>
Lavender ; or False spikenard	<i>Lavandula spica</i>
Lavender, Sea ; or Limonium	<i>Statice limonium</i>
Lavender cotton	<i>Santolina</i>
Lavender, French ; or Cassidone	<i>Lavandula stæchas</i>
Laver	<i>Ulva</i>
Laurel, Cherry ; or Bird cherry ; or common laurel	<i>Prunus lauro-cerasus</i>
Laurel of the ancients ; or com- mon bay	<i>Laurus nobilis</i>
Laurel, or Bay of Alexandria	<i>Ruscus racemosus</i>
Laurel, Dwarf ; or Ivy tree of America	<i>Kalmia</i>
Laurel, Flax-leaved	<i>Daphne gnidium</i>
Laurel, Sea-side	<i>Phyllanthus</i>
Laurel, Spurge	<i>Daphne laureola</i>
Laurustinus	<i>Viburnum tinus</i>
Lauskraut	<i>Delphinium</i>
Lead-wort	<i>Plumbago</i>
Leather-wood	<i>Dirca palustris</i>
Leek	<i>Allium porrum</i>
Lemon tree	<i>Citrus decumanus</i>
Lemon, Water	<i>Passiflora laurifolia</i>
Lentils	<i>Ervum lens</i>
Lentisk ; or Mastick	<i>Pistacia lentiscus</i>
Lentisk ; or Mastick, African	<i>Schinus</i>
Lentisk ; or Mastick, Peruvian	<i>Schinus molle</i>
Leopard's bane	<i>Doronicum</i>
Leopard's bane, German	<i>Arnica montana</i>
Lettuce, common	<i>Lactuca sativa</i>
Lettuce, Hare's ; or Sowthistle	<i>Sonchus</i>
Lettuce, Lamb's ; or Corn salad	<i>Valeriana locusta</i>
Lettuce, Wild	<i>Prenanthes muralis</i>

Life, Tree of; or Arbor vitæ	<i>Thuja occidentalis</i>
Life, Tree of, Chinese	<i>Thuja orientalis</i>
Lignum aloges	<i>Cordia</i>
Lignum vitæ; or Pockwood	<i>Guaiaacum</i>
Lilac	<i>Syringa vulgaris</i>
Lily	<i>Lilium</i>
Lily, African scarlet	<i>Amaryllis guttata</i>
Lily, Asphodel	<i>Crinum</i>
Lily, Atamafco	<i>Amaryllis atamafco</i>
Lily, Belladonna	<i>Amaryllis belladonna</i>
Lily, St. Bruno's; or Great fa- voy spiderwort	<i>Hemerocallis</i>
Lily, Conval; or lily of the valley	<i>Convallaria majalis</i>
Lily, Day	<i>Hemerocallis</i>
Lily, Guernsey	<i>Amaryllis farniensis</i>
Lily, Jacobæa	<i>Amaryllis formosissima</i>
Lily, Japan and Ceylon	<i>Amaryllis orientalis</i>
Lily, Mexican	<i>Amaryllis regina</i>
Lily, Persian	<i>Fritillaria persica</i> 1.
Lily, Martagon	<i>Lilium martagon</i>
Lily, Crown imperial	<i>Fritillaria imperialis</i>
Lily, Crown royal	<i>Fritillaria regia</i>
Lily, Daffodil	<i>Amaryllis (pancratium)</i>
Lily, Hyacinth	<i>Scilla lilio-hyacinthus</i>
Lily, Superb	<i>Gloriosa superba</i>
Lily, Water; or Egyptian bean	<i>Nymphaea nelumbo</i>
Lily, Lesser yellow water, with fringed flowers	<i>Menyanthes nymphoides</i>
Lily, Thorn	<i>Catesbæa spinosa</i>
Lily tree	<i>Liriodendron liliifera</i>
Lime tree	<i>Citrus</i>
Lime, Brook	<i>Veronica beccabunga</i>
Lime, or Linden tree	<i>Tilia europæa</i>
Limonium; or Sea lavender	<i>Statice limonium</i>
Ling; or Heath	<i>Erica</i>
Lion's-foot, Candy	<i>Catananche</i>
Lion's-leaf	<i>Leontice</i>
Lion's tail	<i>Leonurus</i>
Lippelhout; or Cape Phillyrea	<i>Cassine maurœnia</i>
Liquorice, True	<i>Glycyrrhiza glabra</i>
Liquorice, Wild; or Liquorice vetch	<i>Astragalus glycyphyllos</i>
Liquorice, Wild; or Sweet weed	<i>Capraria</i>
M m	Liquorice

Liquorice, Wild; or Knobbed rooted liquorice vetch	Glycine
Live-long; or common orpine	Sedum telephium
Liver-wort	Lichen
Liver-wort, Ash-colored, ground	Lichen caninus
Liver-wort, marsh	Riccia
Liver-wort, noble; or hepatica	Anemone hepatica
Lizard's tail	Saururus
Lizard, or Scorpion's tail	Piper
Loblolly-wood	Cupania americana
Locker goulds; or globe ranunculus	Trollius europæus
Locus-berry tree	Malpighia coriacea
Locus-berry, larger	Malpighia crassifolia
Locust tree; or courbaril	Hymenæa courbaril
Locust tree	Robinia
Locust tree, honey; or three-thorned acacia	Gleditsia triacanthos
Logwood; or Bloodwood	Hæmatoxylon campechianum
London pride; or None so pretty	Saxifraga punctata
Loosestrife	Lythmachia
Loosestrife, podded; or French willow	Epilobium
Loosestrife, purple; or willow herb	Lythrum
Loosestrife, spiked	Lythrum salicaria
Loosestrife; willow herb, Spanish	Lythrum hyssopifolia
Loosestrife, yellow Virginian	Gaura biennis
Lore, or nettle tree	Celtis
Lotus; supposed of Homer	Diospyros lotus
Lotus, honey	Trifolium
Lovage, common	Ligusticum levisticum
Love apple	Solanum mammosum
Love in a mist	Passiflora foetida
Love lies a bleeding	Amaranthus
Lousewort; cockscomb; or rattle	Pedicularis palustris
Lousewort; or stavesacre	Delphinium staphisagria
Lousewort; cockscomb; or rattle, yellow	Rhinanthus
Lucern; Burgundy hay; or Medick	Medicago sativa
Lungwort	Pulmonaria
Lungwort, cow's; white mullein; or big taper	Verbascum thapsus
Lungwort, golden	Hieracium
Lupine	Lupinus

Lustwort

Luftwort	Drosera
Lichnidia; or Lychnis, base	Phlox
Lychnis; campion; or bache- lor's button	Lychnis
Lychnis, wild	Agrostemma

M

Mace reed; or cat's tail	Typha
Machingboy	Euphorbia hyberna
Mackaw tree	Elais guineensis
Mackaw tree, great	Cocos butyracea
Madder	Rubia tinctorum
Madder, little field	Sherardia
Madder, petty	Crucianella
Madder, crosswort, or meadow	Galium boreale
Madwort of Galen	Marrubium alysson
Madwort, German; wild bu- gloss; or Great Goose grass	Asperugo
Maho tree	Hibiscus
Mahogany	Swietenia mahogani
Maiden-hair	Adiantum
Maiden-hair, English black	Asplenium adiantum nigrum
Maiden-hair, Tunbridge	Trichomanes tunbrigense
Maiden-hair, golden	Polytrichum
Maiden-hair, white	Asplenium
Maiden plum tree	Camocladia integrifolia and Spathelia simplex
Maize, or Indian corn	Zea mays
Mallow, or Maul	Malva
Mallow, base	Malope malacoides
Mallow, Jew's	Corchorus
Mallow, Indian	Sida
Mallow, Indian	Urena
Mallow, marsh	Althæa officinalis
Mallow, rose, or holyhock	Alcea rosea
Mallow, Syrian; or Althæa Frutex	Hibiscus syriacus
Mallow tree	Lavatera arborea
Mallow, varied-leaved	Lavatera trimestris
Mallow, Portugal	Lavatera lusitanica
Mallow, vervain	Malva
Mallow, yellow	Sida Abutilon
Mammec	Mammea
Mammec, sapota	Achras sapota

M m 2

Manchi.

Manchineel tree ; or poison tree	Hippomane mancinella
Mandrake	Atropa mandragora
Mango tree	Mangifera
Mangosteen	Garcinia mangostana
Mangrove tree ; black	Rhizophora mangle
Mangrove tree, white	Cenocarpus racemosa
Manihot, or Manioc	Jatropha manihot
Maple, common	Acer campestre
Maple, greater ; or false plane	Acer pseudo-platanus
Maple, sugar	Acer saccharinum
Maracock	Passiflora
Mare's-tail	Hippurus
Marigold	Calendula
Marigold, African	Tagetes erecta
Marigold, corn	Chrysanthemum
Marigold, fig ; or Ficoides	Mesembryanthemum
Marigold, fig ; False ; or groundsel tree with a fi- coides leaf	Cacalia ficoides
Marigold, French	Tagetes patula
Marigold, marsh	Caltha palustris
Marjoram, common, or sweet	Origanum majorana
Marjoram, base	Origanum
Marjoram, Spanish	Urtica Dodartii
Marjoram, wild	Origanum
Marjoram, pot, Winter sweet ; or origany	Origanum heracleoticum
Marvel of Peru	Mirabilis dichotoma
Marum, common	Teucrium marum
Marum, penny royal scented	Melissa fruticosa
Marum, Syrian, or Cretan	Origanum
Masterwort	Imperatoria ostruthium
Masterwort, black, or greater	Astrantia
Mastick, herb ; or Mastick thyme	Thymus mastichina
Mastick, or lentisk, Indian and African	Schinus
Mastick, or lentisk, Peruvian	Schinus molle
Mastick, or lentisk tree	Pistacia lentiscus
Matfelson ; knapweed ; or hard- head	Centaurea jacea
Mat-weed, hooded	Lygeum spartum
Maudlin, sweet	Achillea ageratum
May, or May bush ; or white thorn	Crataegus oxyacantha

May-weed	<i>Anthemis cotula</i>
Meadia ; or American cowslip	<i>Dodecatheon Meadia</i>
Meadow-sweet ; or Queen of the meadows	<i>Spiraea ulmaria</i>
Meadow-sweet, greater	<i>Spiraea</i>
Mealy tree, pliant ; or wayfar- ing tree	<i>Viburnum lantana</i>
Mechoacanna ; or white jalap	<i>Convolvulus</i>
Medic	<i>Medicago</i>
Medick ; Lucern ; or Burgundy hay	<i>Medicago sativa</i>
Medick, sea	<i>Medicago marina</i>
Medlar	<i>Mespilus</i>
Medusa's head	<i>Euphorbia caput medusae</i>
Melancholy ; or sorrowful tree	<i>Nyctanthes arbor tristis</i>
Melilot	<i>Trifolium officinale</i>
Melon	<i>Cucumis melo</i>
Melon, water ; or citrul	<i>Cucurbita citrullus</i>
Menow-weed	<i>Ruellia tuberosa</i>
Mercury, dog's ; or dog's cab- bage	<i>Theligonum cynocrambe</i>
Mercury	<i>Mercurialis</i>
Mercury, English ; all-good or good Henry	<i>Chenopodium bonus Hen- ricus</i>
Mezereon	<i>Daphne mezereum</i>
Meum, or spignel	<i>Achusa meum</i>
Mignonette	<i>Reseda odorata</i>
Milfoil, or Yarrow	<i>Achillea millefolium</i>
Milfoil, or violet, water	<i>Hottonia palustris</i>
Milfoil, water	<i>Myriophyllum</i>
Milfoil, water, or hooded ; or bladderwort	<i>Utricularia vulgaris</i>
Milk, or white wood	<i>Bignonia leucoxylon</i>
Milk wood	<i>Brosimum spurius</i>
Milk-wort	<i>Polygala</i>
Milk wort, or Spurge	<i>Euphorbia</i>
Milkwort, Sea ; or black saltwort	<i>Glaux maritima</i>
Millet, Panic grass	<i>Panicum miliaceum</i>
Millet	<i>Milium</i>
Millet, Indian	<i>Holcus</i>
Milt-waste	<i>Asplenium</i>
Mint, Spear	<i>Mentha viridis</i>
Mint, Pepper	<i>Mentha piperita</i>
Mint, Cat	<i>Nepeta cataria</i>
Mithridate, or Treacle mustard	<i>Thlaspi</i>

Mohoe	Hibiscus
Mistletoe	Viscum album
Moly, with lily flowers	Allium moly
Mombin	Spondias mombin
Money-wort ; or Herb twopence	Lyfimachia nummularia
Money-wort, base	Sibthorpia
Monkey-bread ; or Sour gourd	Adansonia digitata
Monk's-head	Leontodon
Monk's-hood ; or helmet flower	Aconitum napellus
Monster	Fritillaria
Moon-feed	Menispermum
Moon trefoil	Medicago
Moon-wort ; Sattin flower ; or Honesty	Lunaria
Moor, or Moss berries ; or Cran- berries	Vaccinium oxycoccus
Morel	Phallus esculentus
Moringa	Guilandina moringa
Moschatel, Tuberosc ; or Hol- low-root	Adoxa
Moss, tree	Lichen
Moss, Upright fir	Lycopodium
Moss, Water	Fontinalis
Mother-wort	Leonurus cardiaca
Mould	Mucor
Mouse-ear	Hieracium dubium
Mouse-ear, creeping	Hieracium pilosella
Mouse-ear, Golden	Hieracium
Mouse-ear chickweed	Cerastium
Mouse-ear scorpion grass	Myosotis scorpioides
Mouse-tail	Myosurus minimus
Much-good	Athamanta oreoselinum
Mud-wort ; or least water plantain	Limosella aquatica
Mug-weed	Valantia cruciata
Mug-wort, common	Artemisia vulgaris
Mulberry tree	Morus
Mulberry, or Strawberry blite	Bitum capitatum
Mule, Fairchild's	Dianthus
Mule-wort ; or Moon or Mule's fern	Hemionitis
Mullein	Verbascum
Mullein, Black	Verbascum nigrum
Mullein, Moth	Verbascum
Mullein, White ; Hig taper ; or Cow's Lungwort	Verbascum thapsus

Mushroom

Mushroom	Agaricus
Mushroom, Esculent ; or Cham- pignon	Agaricus campestris
Mushroom, cup	Peziza
Mushroom, fairy	Agaricus
Musk-feed	Hibiscus abelmoscus
Musk-wood	Trichilia guarea
Mustard	Sinapis
Mustard, Base	Cleome
Mustard, Buckler ; or Base mith- ridate	Biscutella
Mustard, Hedge	Erysimum officinale
Mustard, Mithridate of Diosco- rides	Lepidium perfoliatum
Mustard, Mithridate ; or Treacle	Thlaspi
Mustard, Base mithridate ; or Sciatica cress	Iberis
Mustard, Tower ; or Wall cress	Turritis
Mustard, Base tower	Arabis
Myrrhis ; or Wild myrrh ; or Sweet cicely	Scandix odorata
Myrtle	Myrtus
Myrtle, Candleberry	Myrica cerifera
Myrtle, Dutch ; or Gale	Myrica gale

N

Naked ladies	Colchicum
Narcissus polyanthus	Narcissus tazetta
Narcissus, or Daffodil	Narcissus
Narcissus ; or Daffodil, Sea	Pancratium
Nard, or Mat-grass	Nardus
Nard, Celtic	Valeriana celtica
Naseberry tree	Sloanea
Nasturtion ; or Cress	Lepidium
Nasturtion ; or cress, Indian	Tropæolum majus
Navel-wort	Cotyledon
Navel-wort, Base	Crassula
Navel-wort, Spring	Cynoglossum omphalodes
Navel-wort, Venus's	Cynoglossum lusitanica
Navel-wort, Water ; or Marsh pennyroyal	Hydrocotyle
Navew	Brassica napus
Nectarine (a variety)	Amygdalus perfica (tunica glabra)
Nep ; or Catmint	Nepeta cataria
Nettle	Urtica

Nettle

Nettle, Dead ; or Archangel	Lamium
Nettle, Hedge	Galeopsis
Nettle, Dead yellow	Galeopsis
Nettle, Roman	Urtica pilulifera
Nettle, Shrubby hedge	Prasium
Nettle tree ; or Lote	Celtis
Net-work	Eriocaulon decangulare
Nicker tree	Guilandina
Nightshade	Solanum
Nightshade, American	Phytolacca
Nightshade, Base	Rovina
Nightshade, deadly ; or Dwarf	Atropa belladonna
Nightshade, Enchanter's	Circæa
Nightshade, Malabar	Basella
Nightshade, three leaved ; or Canada Herb-Paris	Trifolium
Nip ; or stinking ragwort	Senecio jacobea
Nipple-wort, or wart-wort	Lapsana
Nisberry tree	Sloanea
Noli me tangere ; or Yellow bal- famine	Impatiens noli tangere
None so pretty ; or London pride	Saxifraga punctata
None such ; or flower of Bristol	Lychnis
Nopal ; or Cochineel fig	Cactus cochenillifer
Nose-bleed ; or Yarrow	Achillea
Nut tree, Hazel	Corylus avellana
Nut, Bladder	Staphylæa
Nut, Bladder ; or Whortle ber- ry, African	Royena
Nut, Bladder, Laurel-leaved	Hex
Nut, Cashew ; or Acajou	Anacardium occidentale
Nut, Chocolate	Theobroma cacao
Nut Byzantine	Corylus columa
Nut, Cocoa ; or Palm	Cocos nucifera
Nut, Earth, or Pig	Bunium bulbocastanum
Nut, Fausel ; or Palm	Areca
Nut, Ground of America	Arachis hypogæa
Nut, Hicory	Juglans
Nut, Malabar	Justicia adhatoda
Nut, Pea, earth.	Lathyrus pisifolia
Nut, Physic, or Purgine	Jatropha curcas
Nut, Physic, or Purgine	Croton
Nut, Pistacia	Pistacia
Nutmeg	Myristica officinalis
Nut, Spanish	Iris sisyrinchium

Nux,

Nux-vomica

Strychnos nux vomica

O

Oak, Common

Quercus robur

Oak, Evergreen

Quercus ilex

Oak, Dwarf

Teucrium

Oak of Cappadocia

Ambrosia maritima

Oak of Jerusalem

Chenopodium botrys

Oak, Poison ; or Varnish tree

Rhus vernix

Oak, Kermes ; or Grain oak

Quercus coccifera

Oak, Live

Quercus molucca

Oats

Avena

Oats, Sea-side, of Carolina

Uniola

Oats, Wild bearded

Bromus

Oculus Christi

Inula oculus Christi

Oil tree ; Agnus castus ; or Palma Christi

Ricinus communis

Oily purging grain ; or Bonny of Carolina

Sesamum orientale

Okra

Hibiscus esculentus

Old man's beard ; or Traveller's joy

Clematis vitalba

Old man's head

Dianthus

Oleander ; or Rose bay

Nerium

Olibanum

Juniperus lycina

Oleaster ; or Wild olive

Elaeagnus

Olive

Olea

Olive, Spurge

Daphne oleoides

Olive, Wild of Barbadoes

Bontia daphnoides

One-berry ; True love ; or Herb Paris

Paris quadrifolia

One-blade

Convallaria

Onion

Allium cepa

Onion, Sea ; or Squill

Scilla maritima

Opulus ; or Marsh elder

Viburnum

Orange tree

Citrus aurantium

Orange, Seville (a variety)

Citrus aurantium hispaniense

Orange, Mock ; or Syringa

Philadelphus coronarius

Origany, Pot ; or Winter

Origanum heracleoticum

Sweet Marjorum

Ornotta (see Anotta)

Bixa orellana

Orpine ; or Live long

Sedum telephium

Orpine, Base

Andrachne telephioides

Orpine, lesser

Crassula

Orpine, True, of Imperatus

Telephium Imperati

N n

Orach

Orach, Garden	<i>Atriplex hortensis</i>
Orach, Berry-bearing ; or Straw- berry blite	<i>Blitum capitatum</i>
Orach, Creeping shrubby	<i>Atraphaxis inermis</i>
Orach, Wild ; or Goosefoot ; or Fat hen	<i>Chenopodium vulvaria</i>
Orach, Shrubby sea ; or Halimus	<i>Atriplex halimus</i>
Orris, Florence	<i>Iris florentina</i>
Osier, Yellow	<i>Salix vitellina</i>
Osier, Brown	<i>Salix amygdalina</i>
Osmund, Royal ; or Flowering fern	<i>Osmunda regalis</i>
Oswego tea	<i>Monarda didyma</i>
Ox-eye	<i>Buphthalmum</i>
Ox-eye of old authors	<i>Anthemis</i>
Ox-eye ; or Greater daisy	<i>Chrysanthemum leucanthemum</i>
Oxslips ; or Cowslips (a variety)	<i>Primula veris</i>
Ox-tongue	<i>Picris</i>
Oyster-green	<i>Ulva lactuca</i>
P	
Paddock, or Toad stool	<i>Agaricus</i>
Paddock-pipe	<i>Equisetum</i>
Pæony	<i>Pæonia</i>
Pagils ; or Paigles ; or Cowslips	<i>Primula veris (officinalis)</i>
Painted ladies	<i>Dianthus</i>
Palm, Greater ; or Date or Dactyl tree	<i>Phoenix dactylifera</i>
Palm, Lesser or Dwarf ; or Palmetto	<i>Chamærops humilis</i>
Palm, Cocoa nut	<i>Cocos nucifera</i>
Palm, Fauset nut	<i>Areca</i>
Palm, Malabar ; called Ampana and Corimpana	<i>Borassius flabelliformis</i>
Palm, Wild Malabar ; called Katou indel	<i>Elate silvestris</i>
Palm, Mountain, with largest leaves ; called Codda Panna, or Pa'metto	<i>Corypha umbraculifera</i>
Palm, with ringed stems ; called Todda panna	<i>Cycas circinalis</i>
Palm, with bipinnate leaves ; called Schunda panna	<i>Caryota urens</i>
Palma Christi ; Agnus Castus ; or Oil tree	<i>Ricinus communis</i>

Pampelmoe ; or Shaddock (a variety)	<i>Citrus aurantium</i>
Pansy	<i>Viola tricolor</i>
Papyrus, Chinese	<i>Morus papyrifera</i>
Papyrus, Egyptian	<i>Cyperus papyrus</i>
Papaw tree	<i>Carica papaya</i>
Papaw tree of N. America	<i>Annona triloba</i>
Paradise, Grain of	<i>Amomum granum paradisi</i>
Park-leaves	<i>Hypericum androsaemum</i>
Parley ; or Petroseline	<i>Apium petroselinum</i>
Parley, Base	<i>Caucalis</i>
Parley, Corn ; or Honewort	<i>Sison segetum</i>
Parley, Fools	<i>Æthusa</i>
Parley, Macedonian	<i>Bubon macedonicum</i>
Parley, Water ; or Smallage	<i>Apium graveolens</i>
Parley, Milk, or Cow's	<i>Selinum</i>
Parley, Mountain	<i>Athamanta</i>
Parley, Stone	<i>Bubon</i>
Parley, Wild, of America	<i>Cardiospermum</i>
Parley pier ; or Break stone ; or Percepier	<i>Aphanes arvensis</i>
Parnep	<i>Pastinaca sativa</i>
Parnep, Cow's	<i>Heracleum sphondylium</i>
Parnip, Prickly	<i>Echinophora</i>
Parnip, Water	<i>Sium latifolium</i>
Pasque-flower	<i>Anemone pulsatilla</i>
Passion flower	<i>Passiflora</i>
Patience rhubarb	<i>Rumex patientia</i>
Pea	<i>Pisum sativum</i>
Pea, Chick ; or Garavances	<i>Cicer arietinum</i>
Pea, or Vetch, Chickling	<i>Lathyrus</i>
Pea, Earth nut	<i>Lathyrus pisifolia</i>
Pea, Everlasting	<i>Lathyrus latifolia</i>
Pea, Heart	<i>Cardiospermum</i>
Pea, Heath ; or Bitter vetch	<i>Orobys</i>
Pea, Painted lady	<i>Lathyrus</i>
Pea, Pigeon	<i>Cytisus cajan</i>
Pea, Sweet-scented	<i>Lathyrus odoratus</i>
Pea, Tangier	<i>Lathyrus tangitanus</i>
Pea, Winged	<i>Lotus tetragonolobus</i>
Pea, Wood	<i>Orobys</i>
Peach	<i>Amygdalus persica</i>
Peach, Wolf's	<i>Solanum lycopersicum</i>
Pear tree, common	<i>Pyrus communis</i>
Pear, Avocado ; or Alligator	<i>Laurus persea</i>

Pear, Batchelor's	<i>Solanum mammosum</i>
Pear, Garlic	<i>Cratæva</i>
Pear, Prickly	<i>Cactus</i>
Pearl-wort	<i>Sagina procumbens</i>
Pellitory of the wall	<i>Parietaria officinalis</i>
Pellitory, Base	<i>Achillea</i>
Pellitory, Double	<i>Achillea</i>
Pellitory, of Spain	<i>Anthemis pyrethrum</i>
Pellitory of Spain, false	<i>Chrysanthemum</i>
Pellitory; or tooth-ach tree	<i>Zanthoxylum</i>
Pennyroyal	<i>Mentha pulegium</i>
Pennyroyal, Virginian	<i>Satureja</i>
Penny-wort, Marsh; or Water navelwort	<i>Hydrocotyle</i>
Pennywort, or Navelwort, Wall	<i>Cotyledon</i>
Penguin, or wild ananas	<i>Bromelia pinguin</i>
Penstemon	<i>Chelone</i>
Pepper	<i>Piper</i>
Pepper, Black	<i>Piper nigrum</i>
Pepper, Barbary	<i>Capficum</i>
Pepper, Bell	<i>Capficum</i>
Pepper, Bird	<i>Capficum</i>
Pepper, Bonnet	<i>Capficum</i>
Pepper, Cayenne	<i>Capficum</i>
Pepper, Guinea	<i>Capficum</i>
Pepper, Jamaica; or All-spice	<i>Capficum anhuum</i>
Pepper, Indian	<i>Myrtus pimenta</i>
Pepper, long	<i>Capficum</i>
Pepper, poor man's	<i>Piper longum</i>
Pepper, wall; or stone-crop	<i>Lepidium latifolium</i>
Pepper, water; or arle-smart	<i>Sedum acre</i>
	<i>(Perficaria) Polygonum</i>
	<i>hydropiper</i>
Pepper-grass	<i>Pilularia globulifera</i>
Pepper-grass of Jamaica	<i>Lepidium virginicum</i>
Pepper, pot	<i>Capficum</i>
Pepper tree	<i>Vitis arborea</i>
Pepper, wort; or dittander	<i>Lepidium</i>
Percepier; or parsley pier	<i>Aphanes arvensis</i>
Periwinkle	<i>Vinca</i>
Perficaria	<i>Polygonum perficaria</i>
Pestilent-wort	<i>Tussilago petasites</i>
Petroseline; or parsley	<i>Apium petroselinum</i>
Pheasant's eye	<i>Adonis</i>
Pheasant's eye pink	<i>Dianthus</i>
Phillyrea; or mock privet	<i>Phillyrea</i>

Phillyrea, false	Rhamnus alaternus
Phillyrea of the Cape; or Hot-tentot cherry	Cassine maurocenia
Phu	Valeriana
Physic-nut-tree	Jatropha curcas.
Physic-nut, French	Jatropha multifida
Pigeon wood	Adelia
Pile-wort	Ranunculus ficaria
Pimento, or all-spice; or Jamaica pepper	Myrtus pimenta
Pimpinel	Anagallis
Pimpinel, water; or brooklime	Veronica beccabunga
Pimpinel, round-leaved water	Samolus Valerandi
Pimpinel of the woods, yellow	Lyfimachia nemorum
Pimpillo	Cactus
Pineaster	Pinus silvestris
Pine tree	Pinus
Pine, Cembro	Pinus cembra
Pine, Scotch (var.)	Pinus sylvestris
Pine, stone	Pinus pinea
Pine, Weymouth, or New England	Pinus strobus
Pine, ground, or dwarf	Teucrium chamaepithys
Pine, stinking ground	Camphorosma
Pine, heath low	Coris monspeliensis
Pine apple, or ananas	Bromelia ananas
Pine apple, wild	Renealmia exaltata
Pine apple, wild; or penguin	Bromelia pinguin
Pink	Dianthus
Pink, China	Dianthus chinensis
Pink, Indian; or quamoclit	Ipomoea quamoclit
Pink, Indian	Lonicera
Pink, Indian	Spigelia marilandica
Pink, sea; or thrift	Statice
Pipe tree	Syringa
Pipe tree, pudding	Cassia fistula
Piperidge bush; or berberry	Berberis
Piquets, or piquettees	Dianthus
Pistacia nut	Pistacia
Pisshamin, or persimon plum	Diospyros virginiana
Pistacia, black Virginian hazel-leaved	Hamamelis virginica
Pitch tree	Pinus picea
Pitajaya of California	Cactus Pitajaya
Plane tree	Platanus

Plane

Plane tree, false ; or greater	<i>Acer pseudo-platanus</i>
mapple	
Plant ; burning thorny	<i>Euphorbia</i>
Plant, egg	<i>Solanum melongena</i>
Plant, humble sensitive	<i>Mimosa</i>
Plant, sensitive	<i>Mimosa</i>
Plant, base sensitive	<i>Æschinomene</i>
Plantain, common broad	<i>Plantago major</i>
Plantain, hartshorn, or buck-	<i>Plantago coronopifolia</i>
horn	
Plantain, ribbed ; or ribwort	<i>Plantago lanceolata</i>
Plantain, star-headed water	<i>Alisma plantago</i>
Plantain, least water ; or Mud-	<i>Limosella aquatica</i>
wort	
Plaintain ; or Indian shot	<i>Canna indica</i>
Plantain ; or bread tree	<i>Musa paradisiaca</i>
Plum tree	<i>Prunus</i>
Plum, black American ; or Co-	<i>Chrysobalanus icaco</i>
coa ; or maiden	
Plum, Assyrian ; or Sebesten	<i>Cordia sebestena</i>
Plum, Bay ; or Guava	<i>Psidium</i>
Plum, hog ; Brazilian or Jamaica	<i>Spondias Myrobalanus</i>
Plum, Indian date	<i>Diospyros lotus</i>
Plum, Pishamin, persimon, or	<i>Diospyros virginiana</i>
Pitchumon	
Poccoon ; or puccoon	<i>Sanguinaria canadensis</i>
Pockwood ; or lignum vitæ	<i>Guaicum officinale</i>
Poison tree ; or manchineel	<i>Hippomane manchinella</i>
Poison tree	<i>Rhus toxicodendron</i>
Poison ash or oak ; or varnish tree	<i>Rhus vernix</i>
Poison berry	<i>Cestrum vespertinum</i>
Poison bush ; or spurge	<i>Euphorbia</i>
Poley, Mountain	<i>Teucrium polium</i>
Poley grass	<i>Lythrum</i>
Polyanthus (a variety)	<i>Primula veris (elatior)</i>
Polypody	<i>Polypodium</i>
Polyanthus narcissus	<i>Narcissus tazetta</i>
Pomegranate	<i>Punica granatum</i>
Pompion	<i>Cucurbita pepo</i>
Pond weed	<i>Potamogeton natans</i>
Pond weed, Treble-headed	<i>Zanichellia palustris</i>
Poplar	<i>Populus</i>
Popple ; or cockle	<i>Agrostemma githago</i>
Poppy	<i>Papaver</i>
Poppy, corn ; or corn rose	<i>Papaver dubium</i>

Poppy.

Poppy, horned	<i>Chelidonium corniculatum</i>
Poppy, prickly; or fig infernal	<i>Argemone</i>
Poppy, spatling; or white behen	<i>Cucubalis behen</i>
Pork weed; or pork phyfic	<i>Phytolacca</i>
Potatoe	<i>Solanum tuberosum</i>
Potatoe, Indian; or yam	<i>Dioscorea bulbifera</i>
Potatoe, or batata, Spanish	<i>Convolvulus batatas</i>
Prick wood	<i>Euonymus</i>
Prickly yellow-wood	<i>Zanthoxylum clava Herculis</i>
Primrose, common	<i>Primula veris</i>
Primrose tree; or night primrose	<i>Oenothera</i>
Primrose, peerless	<i>Narcissus</i>
Prince's feather	<i>Amaranthus caudatus</i>
Prince-wood	<i>Cordia gerascanthes</i>
Privet; or primp	<i>Ligustrum vulgare</i>
Privet, evergreen	<i>Rhamnus</i>
Privet, mock; or phillyrea	<i>Phillyrea</i>
Privy-saugh	<i>Ligustrum</i>
Prune; or plum	<i>Prunus</i>
Puccoon	<i>Sanguinaria canadensis</i>
Pudding grass	<i>Mentha</i>
Pudding pipe tree	<i>Cassia fistula</i>
Puff-balls	<i>Lycoperdon bovista</i>
Pulsatilla	<i>Anemone pulsatilla</i>
Pumpkin (see Pompion)	<i>Cucurbita pepo</i>
Purging grain, oily	<i>Sesamum</i>
Purslain	<i>Portulaca</i>
Purslain, horse	<i>Trianthema</i>
Purslain, sea	<i>Atriplex portulacoides</i>
Purslain, water	<i>Peplis portula</i>
Purslain, tree sea	<i>Atriplex halimus</i>
Pulegium; or pennyroyal	<i>Mentha pulegium</i>
Pyracantha	<i>Mespilus pyracantha</i>

Q

Quake grass; or cow quakes	<i>Briza</i>
Quamoclit; or Indian pink:	<i>Ipomoea quamoclit</i>
or sweet William; or scarlet convolvulus	
Queen of the meadows; or	<i>Spiræa ulmaria</i>
Meadow sweet	
Quick; or white thorn	<i>Crataegus oxyacantha</i>
	Quicken-

Quicken-beam ; or Wicken ; or *Sorbus aucuparia*
 quick-beam ; or Mountain
 ash

Quince tree

Pyrus cydonia

Quill-wort

Isoetes lacustris

R

Radish, Common esculent

Raphanus sativus

Radish, horse

Cochlearia armoracia

Radish, or Cress, Water

Sisymbrium nasturtium

Ragged Robin ; or *Lychnis*

Lychnis flos-cuculi

Cuckow flower

Ragwort, common stinking ; or *Senecio jacobea*

Nip

Ragwort, Sea, or African

Othonna

Ragworts of old authors

Senecio

Ragworts of old authors

Solidago

Ramoon tree

Trophis Americana

Rampions, common esculent

Campanula rapunculus

Rampions, horned

Phyteuma

Rampions, Crested

Lobelia

Rampions, with scabious heads ; *Jasione montana*
 or hairy sheep's scabious

Ramsons

Allium ursinum

Ranunculus ; or Crow-foot

Ranunculus

Ranunculus, Globe ; or Locker
 gowlands *Trollius europæus*

Ranunculus, Garden

Ranunculus asiaticus

Rape, Cole

Brassica

Rape, Broom

Orobanche

Raspberry

Rubus idaeus

Raspberry, Flowering

Rubus odoratus

Rattle, Cockscorn ; or Louse-
 wort *Pedicularis palustris*

Rattle ; or Cockscorn, Yellow ; *Rhinanthus crista galli*
 or Elephant's head

Rattlesnake root, Senega

Polygala senega

Rattlesnake root, Dr Witt's

Prenanthes altissima

Rattlesnake weed

Eryngium aquaticum

Red-bud tree ; or Canada Judas
 tree *Cercis canadensis*

Red-worts, Spanish ; or Straw-
 berry tree *Arbutus unedo*

Reed,

Reed, common	<i>Arundo phragmites</i>
Reed, Bur	<i>Sparganium</i>
Reed, Indian flowering	<i>Canna angustifolia</i>
Reed mace	<i>Typha</i>
Rennet, Cheese, or Yellow lady's bedstraw	<i>Galium verum</i>
Rest-harrow ; Petty whin ; or Cammock	<i>Ononis</i>
Rhamnus, Bane ; or Sea buck-thorn	<i>Hyppophae</i>
Reindeer liverwort	<i>Lichen rangiferinus</i>
Rhapontic	<i>Rheum rhaponticum</i>
Rhubarb	<i>Rheum</i>
Rhubarb, true Turkey	<i>Rheum palmatum</i>
Rhubarb, British	<i>Rumex britannica</i>
Rhubarb, Monk's ; or Patience rhubarb	<i>Rumex patientia</i>
Ribwort ; or ribbed plantain	<i>Plantago lanceolata</i>
Rice	<i>Oryza sativa</i>
Ricinus, Bane	<i>Croton</i>
Ringworm-bush	<i>Cassia alata</i>
Roan tree ; Mountain ash ; or Wicken	<i>Sorbus aucuparia</i>
Robert, herb	<i>Geranium robertianum</i>
Rocambole	<i>Allium scorodoprasum</i>
Rock germander	<i>Veronica teucrium</i>
Rock rose	<i>Cistus</i>
Rocket	<i>Brassica eruca</i>
Rocket, Bane ; or Weld	<i>Reseda</i>
Rocket, Corn	<i>Bunias</i>
Rocket, Marsh	<i>Sisymbrium</i>
Rocket, Sea	<i>Bunias orientalis</i>
Rocket, Square podded, of Montpellier	<i>Bunias cakile</i>
Rocket, Water, or Wood	<i>Sisymbrium silvestre</i>
Rocket, Winter	<i>Sisymbrium</i>
Rocket, Dame's violet ; or Queen's July-flower	<i>Hesperis</i>
Rod, Aaron's ; King's spear ; or Asphodel	<i>Asphodelus</i>
Rod, Bloody	<i>Cornus sanguinea</i>
Rod, Golden	<i>Solidago</i>
Rod tree, Golden ; or Yerva mora	<i>Bosca yerva-mora</i>

O o

Rod

Rod, Shepherd's, or Teazel	<i>Dipsacus fullonum</i>
Rod-wood	<i>Laetia guidonia</i>
Roe-buck berries	<i>Rubus saxatilis</i>
Root, Indian arrow	<i>Maranta</i>
Root, China	<i>Smilax china</i>
Root, false China	<i>Senecio pseudochina</i>
Root, fever ; or Dr. Tinker's weed	<i>Triosteum perfoliatum</i>
Root, hollow ; or Tuberous moschatel	<i>Adoxa moschatellina</i>
Root, rose	<i>Rhodiola rosea</i>
Root, Snake, of Virginia	<i>Aristolochia serpentaria</i>
Root, Snake, Black or Wild, of Virginia	<i>Actæa racemosa</i>
Root, sweet ; or Liquorice	<i>Glycyrrhiza glabra</i>
Rose	<i>Rosa</i>
Rose, China	<i>Hibiscus rosa sinensis</i>
Rose, Christmas ; or black hellebore	<i>Helleborus</i>
Rose, Corn	<i>Papaver dubium</i>
Rose, Gelder ; or Snowball tree (a variety)	<i>Viburnum opulus, (flore pleno)</i>
Rose, Virginian Gelder, with a currant leaf	<i>Spiræa opulifolia</i>
Rose, Martinico	<i>Hibiscus mutabilis</i>
Rose, Rock	<i>Cistus</i>
Rose of Jericho	<i>Anastatica hierochuntia</i>
Rose bay ; or Oleander	<i>Nerium oleander</i>
Rose bay, Dwarf ; or Mountain	<i>Rhododendrum</i>
Rosebay willow herb	<i>Epilobium</i>
Rose, Mallow ; or Hollyhock	<i>Alcea rosea</i>
Rose-root	<i>Rhodiola rosea</i>
Rosemary	<i>Rosmarinus officinalis</i>
Rosemary ; or Poet's cassia	<i>Osyris alba</i>
Rosemary, Wild ; or Marsh cistus	<i>Ledum palustre</i>
Rosemary, Lesser wild	<i>Andromeda</i>
Rose wood	<i>Amyris balsamifera</i>
Rue ; or Herb of grace	<i>Ruta</i>
Rue, Dog's	<i>Scrophularia</i>
Rue, Goat's	<i>Galega</i>
Rue, Meadow ; or Feathered columbine	<i>Thalictrum aquilegifolium</i>
Rue, Wall	<i>Asplenium ruta muraria</i>
Rue, Wild Assyrian	<i>Paganum harmala</i>

Ruffle,

Ruffle, Lady's	Lychnis
Rupture-wort	Herniaria
Rupture-wort, Least	Linum
Rush	Juncus
Rush, Bull	Scirpus
Rush, Flowering; or Water gladiole	Butomus umbellatus
Rush, Lesser, flowering	Scheuchzeria palustris
Rush, round black-headed, Marsh, or Bog	Schoenus
Rush, Sweet; or Calamus aro- maticus	Acorus calamus
Rye	Secale
Rye grass; or Wild rye	Hordeum

S

Sabin; or Savin	Juniperus fabina
Saffron	Crocus sativus
Saffron, Base; or Safflower	Carthamus tinctorius
Saffron, Meadow	Colchicum autumnale
Saffron, Mountain spring	Bulbocodium vernum
Sage	Salvia
Sage, Wild or Wood	Teucrium scorodonia
Sage, Indian wild	Lantana aculeata
Sage; or Cowslip of Jerusalem	Pulmonaria officinalis
Sage, Jerusalem; or Sage tree	Phlomis
St John's bread; or Carob tree	Ceratonia filiqua
St. John's Wort, Common	Hypericum perforatum
St. Peter's wort; or Base St. John's wort	Ascyrum
St. Peter's wort	Hypericum quadrangulare
St. Peter's wort, Shrubby	Lonicera symphoricarpus
Saintfoin; or Cock's head	Hedysarum onobrychis
Sallad, Corn; or Lamb's lettuce	Valeriana locusta
Sal-kali; or jointed glasswort	Salicornia
Sallow	Salix fusca
Salfasy; or Garden goat's-beard	Tragopogon porrifolium
Salt-wort	Salicornia
Salt-wort, Black; or Sea chick- weed; or Milk-wort	Glaux maritima
Sambo	/ Cleome
Samphire; or Sea fennel	Crithmum maritimum

Samphire, Golden	<i>Inula crithmifolia</i>
Sandbox; or farting tree; or Jamaica walnut	<i>Hura crepitans</i>
Sanders, yellow	<i>Camocladia pubescens</i>
Sanicle	<i>Sanicula</i>
Sanicle, American	<i>Tiarella. Heuchera</i>
Sanicle, American, base	<i>Mitella</i>
Sanicle, Bear's-ear	<i>Cortusa</i>
Sanicle, Yorkshire; or Butter-wort	<i>Pinguicula</i>
Sandwort	<i>Arenaria</i>
Sapadillo tree	<i>Sloanea</i>
Sapota	<i>Achras sapota</i>
Sapota mammée	<i>Achras mammosa</i>
Saracen's wound-wort, or confound	<i>Solidago</i>
Saracen's wound-wort, or confound, true	<i>Senecio farracenicus</i>
Sarsaparilla	<i>Smilax sarsaparilla</i>
Sassafras; or Ague tree	<i>Laurus sassafras</i>
Sassafras (see Salsafy)	<i>Tragopogon porrifolium</i>
Sattin flower; Moonwort; or Honesty	<i>Lunaria</i>
Satyrian; or Dog-stones	<i>Orchis</i>
Sauce-alone; or Jack by the hedge	<i>Erysimum alliarum</i>
Savin; or Sabin	<i>Juniperus sabina</i>
Savin tree, Indian	<i>Bauhinia aculeata</i>
Saunders, White, or Yellow	<i>Santalum album</i>
Saunders, red	<i>Pterocarpus santalinus</i>
Savory	<i>Satureja</i>
Savoy cabbage	<i>Brassica</i>
Saw-wort	<i>Serratula</i>
Saxifrage	<i>Saxifraga</i>
Saxifrage, White or Granulated	<i>Saxifraga granulata</i>
Saxifrage, Burnet	<i>Pimpinella saxifraga</i>
Saxifrage, Golden	<i>Chrysosplenium</i>
Saxifrage, Meadow; or Hog's fennel	<i>Peucedanum</i>
Scabious, common	<i>Scabiosa arvensis</i>
Scabious, Hairy sheep's; Ram-pions with scabious heads	<i>Jasione montana</i>
Scallion	<i>Allium</i>
Scammony, Syrian, or the true	<i>Convolvulus scammonia</i>
Scammony of Montpellier	<i>Cynanchum acutum</i>
	<i>Sciatica,</i>

Sciatica grass; or base Mithridate Iberis mustard	
Scordium	Teucrium scordium
Scorpion grass; or Caterpillars	Scorpiurus
Scorpion grass, Mouse-ear	Myofotis scorpioides
Scorpion's thorn; or Gorse	Ulex europæus
Screw tree	Helicteres
Skull or Skull cap	Scutellaria
Scurvy grass; or spoon-wort	Cochlearia officinalis
Sea-beard	Conserve rupestris
Sea-grass	Ruppia maritima
Sea-weed	Fucus
Sebesten; or Assyrian plum	Cordia sebestena
Sedge; or Char	Carex
Sedum, Saxifrage	Saxifraga sedoides
Seed, Heart	Cardiospermum
Segs	Iris pseud-acorus
Self-heal	Prunella
Senna of the shops	Cassia senna
Senna, base	Cassia
Senna, Bladder	Colutea arborescens
Senna, Jointed-podded bladder; or Scorpion senna	Coronilla emerus
Senna, Wild	Cassia
Sengreen; or Houseleek	Sempervivum
Sensitive plant	Mimosa
Sensitive plant, base	Æschynomene
Septfoil; or Tormentil	Tormentilla
Sermountain; or Laserwort	Laserpitium filer
Serpent's, or Adder's tongue	Ophioglossum
Service tree	Sorbus domestica
Service, Maple-leaved, or Wild	Cratægus torminalis
Sesame; or Oily grain	Sesamum orientale
Setwell, see Zedoary	
Setwell, Garden	Valeriana
Setterwort; or Bear's foot	Helleborus fœtidus
Shaddock; or Pampelmoe (a variety)	Citrus aurantium
Shallot; see Eschalot (a variety)	Allium cepa
Shave grass	Equisetum
Shepherd's needle; or Venus's comb	Scandix pecten
Shepherd's purse	Thlaspi bursa pastoris Shepherd's

Shepherd's rod ; or Téazel	<i>Dipsacus fullonum</i>
Shot, Indian ; or Indian cane	<i>Canna indica</i>
Shot, Plantain	<i>Canna</i>
Sickle-wort	<i>Coronilla</i>
Sidesaddle flower	<i>Sarracenia</i>
Silk cotton tree	<i>Bombax</i>
Silk, Virginian	<i>Periploca</i>
Silver bush ; or Jupiter's beard	<i>Anthyllis barba jovis</i>
Silver tree	<i>Protea argentea</i>
Silver weed ; or Goose grass	<i>Potentilla anserina</i>
Simpla nobla ; or base shrubby hare's ear	<i>Phyllis nobla</i>
Simpler's joy ; or common ver- vain	<i>Verbena officinalis</i>
Skirret	<i>Sium fissarum</i>
Sky flower	<i>Cineraria</i>
Sloe tree	<i>Prunus spinosa</i>
Sloke	<i>Ulva</i>
Smallage ; or water parsley	<i>Apium graveolens</i>
Snail trefoil	<i>Medicago</i>
Snake weed	<i>Polygonum viviparum</i>
Snake-root, Virginian	<i>Aristolochia serpentaria</i>
Snake-root, Black or Wild of America	<i>Actæa</i>
Snap-tree	<i>Justicia hyssopifolia</i>
Snap-dragon	<i>Antirrhinum</i>
Snap-dragon of America	<i>Ruellia</i>
Sneeze-wort	<i>Achillea ptarmica</i>
Sneeze-wort, Austrian	<i>Xeranthemum annuum</i>
Snowball tree ; or Gelder rose	<i>Viburnum opulus (flore pleno)</i>
Snowberrybush	<i>Lonicera</i>
Snow-drop	<i>Galanthus nivalis</i>
Snowdrop, Greater	<i>Leucojum</i>
Snowdrop, or Fringe tree	<i>Chionanthus</i>
Soap apple, or berry	<i>Sapindus saponaria</i>
Soap-wort	<i>Saponaria</i>
Soft grass	<i>Ægilops</i>
Soldanel	<i>Soldanella alpina</i>
Soldanel of the shops	<i>Convolvulus soldanella</i>
Soldier, Water ; or Water aloe	<i>Stratiotes aloides</i>
Soldier's cullions	<i>Orchis pyramidalis</i>
Soloman's seal	<i>Convallaria polygonatum</i> Soloman's

Solomon's seal of America	Uvularia
Sorgo	Holcus sorghum
Sorrel ; or Green sauce	Rumex acetosa
Sorrel, Indian red	Hibiscus
Sorrel, Indian white	Hibiscus
Sorrel, Wood	Oxalis acetosella
Sorrel tree	Andromeda arborea
Sorrowful, or Melancholy tree	Nyctanthes arbor tristis
Sour sop	Annona muricata
Southern wood	Artemisia abrotanum
Sow-bread ; or Cyclamen	Cyclamen
Soy ; or Kidney bean of India	Dolichos soja
Spanish Elm, or Prince-wood	Cordia gerascanthes
Sparrow-wort	Passerina
Sparrow-wort, Tragus's	Stellera passerina
Spearwort	Ranunculus
Speerage. See Asparagus	
Speedwell	Veronica
Speedwell, Male, or Fluell'n	Veronica officinalis
Speedwell, female	Antirrhinum elatine
Speedwell, water ; or brooklime	Veronica beccabunga
Spice-wood	Laurus
Spice all ; or pimento	Myrtus pimenta
Spider-wort	Anthericum
Spider-wort, great favoy ; or St Bruno's lily	Hemerocallis
Spider-wort, Virginian	Tradescantia virginica
Spignel, common ; or Meum	Æthusa meum
Spignel, wild ; or French hartwort	Seseli
Spike gras, winged	Stipa
Spikenard, Indian, or true	Nardus indica
Spikenard, base French	Nardus
Spikenard, or nard, Celtic	Valeriana celtica
Spikenard, false ; or lavender	Lavandula spica
Spikenard, plowman's ; or groundsel tree	Baccharis
Spikenard, plowman's, or fleabane	Coniza squarrosa
Spikenard, wild	Afarum
Spinach	Spinacia oleracea
Spinach, strawberry ; or blite	Blitum capitatum
Spindle tree	Euonymus
Spindle or staff tree, climbing	Celastrus
Spindle tree, base	Kiggelaria africana
Spiræa frutex	Spiræa falcifolia

Spiræa

Spiraea, African	Diosma
Spleen-wort	Asplenium
Spleen-wort rough	Lonchitis hirsuta
Spleen-wort rough	Polypodium asplenifolium
Spoonwort ; or scurvy grass	Cochlearia officinalis
Sponge (a Zoöphyte)	Agaricus
Spunk	Euphorbia
Spurge, or Milkwort	Daphne laureola
Spurge laurel ; or dwarf bay	Daphne oleoides
Spurge olive	Spergula
Spurry	Cucurbita melopepo
Squash	Scilla maritima
Squill ; or sea onion	Pancratium maritimum
Squill, lesser white ; or sea daf- fodil	Asperula cynanchica
Squinanch	Celastrus
Staff or Spindel tree, climbing	Dipsacus fullonum
Staff, shepherd's or teazel	Rhus
Stag's-horn tree	Ornithogalum pyramidale
Star of Bethlem	Ornithogalum arabicum
Star of Arabia, and Constantino- ple	Ornithogalum nutans
Star of Naples	Callitriche
Star-grass ; or starry duck-meat	After
Star-wort ; or After	Tremella
Star-jelly	Buphthalmum
Star-wort, Base	Tridax procumbens
Star-wort, trailing American	Inula helenium
Star-wort, yellow ; or elecampane	Delphinium staphisagria
Stavesacre ; or louse-wort	Stellaria
Stitch-wort ; or Star-flower	Phallus
Stink-horns	Cheiranthus
Stock July-flower	Cheiranthus annuus
Stock, annual, or ten weeks	Hesperis
Stock, dwarf annual	Hesperis
Stock, Virginian	Sedum acre
Stonecrop ; or wall pepper	Chenopodium
Stonecrop tree ; or shrubby glass-wort	
Stramonium ; or thorn apple	Datura stramonium
Strawberry	Fragaria vesca
Strawberry, Barren	Fragaria sterilis
Strawberry, Barren	Potentilla monspeliensis
Strawberry blite ; or Spinach	Blitum capitatum

Straw

Strawberry tree; or Spanish- red-worts	<i>Arbutus unedo</i>
Succory; or cichory	<i>Cichorium</i>
Succory, gum	<i>Chondrilla</i>
Succory, warted; or <i>Zacintha</i>	<i>Laplanā zacintha</i>
Sugar cane	<i>Saccharum officinale</i>
Sulphur-wort; or hog's fennel	<i>Peucedanum</i>
Sultan flower; or sweet sultan	<i>Centaurea moschata</i>
Sumach	<i>Rhus</i>
Sumach, Myrtle-leaved	<i>Coriaria myrtifolia</i>
Sumach, tanner's	<i>Coriaria ruscifolia</i>
Sundew	<i>Drosera</i>
Sun-flower, common annual	<i>Helianthus annuus</i>
Sun-flower, perennial	<i>Helianthus multiflorus</i>
Sun-flower, base or willow leaved	<i>Helenium autumnale</i>
Sun-Sower, dwarf American	<i>Rudbeckia</i>
Sun-flower; dwarf Carolina	<i>Polymnia tetragonotheca</i>
Sun-flower, little	<i>Cistus</i>
Sun-flower, Mariland tickseeded	<i>Coreopsis verticillata</i>
Swallow-wort	<i>Asclepias</i>
Swallow-wort, African; or cockscorn fritillary	<i>Stapelia variegata</i>
Sweet-briar; or eglantine	<i>Rosa eglanteria</i>
Sweet John; and sweet William	<i>Dianthus barbatus</i>
Sweet sop	<i>Annona squamosa</i>
Sweet sultan	<i>Centaurea moschata</i>
Sweet weed	<i>Capraria</i>
Sweet William; and sweet John	<i>Dianthus barbatus</i>
Sweet William, Indian; or qua- moclit	<i>Ipomoea quamoclit</i>
Sweet wood	<i>Laurus leucoxyllum</i>
Swine's cress	<i>Cochlearia</i>
Sycamore, true; or Pharaoh's fig tree	<i>Ficus sycamorus</i>
Sycamore or Plane, false; or greater mapple	<i>Acer pseudo-platanus</i>
Syringa; or Mock orange	<i>Philadelphus coronarius</i>

T

Tacamahaca	<i>Populus balsamifera</i>
Talow tree	<i>Croton sebiferum</i>
Tamarind tree	<i>Tamarindus indica</i>
Tamarisk	<i>Tamarix</i>
Tansey, common	<i>Tanacetum vulgare</i>
	Tansey,

Tansey, wild	Potentilla
Tare, or Vetch with black seed	Vicia sativa
Tarragon ; or dragon-wort	Artemisia dracunculus
Tarton-raire	Daphne tartonraira
Tea tree, Bohea	Thea bohea
Tea tree; green	Thea viridis
Tea, New Jersey	Ceanothus americana
Tea, Labrador	Ledum palustre
Tea, Oswego ; or Indian baulm	Monardia didyma
Tea; Paraguay ; South sea ;	Ilex cassine
Yapon ; or Dahoon holly	
Teazel, Fuller's; or shepherd's rod	Dipsacus fullonum
Teazel, small	Dipsacus pilosus
Tent-wort	Asplenium
Thatch tree	Corypha minor
Thistle	Carduus
Thistle common corn	Serratula arvensis
Thistle, blessed ; or carduus benedictus	Centaurea benedicta
Thistle carline	Carlina
Thistle, distaff	Atractylis
Thistle, distaff, yellow	Carthamus lanatus
Thistle, fish	Cnicus acarna
Thistle, fuller's ; or teazel	Dipsacus fullonum
Thistle, globe	Echinops
Thistle, golden	Scolymus
Thistle hedge-hog	Cactus
Thistle, lady's, or milk	Carduus marianus
Thistle, melancholy	Carduus helenioides
Thistle, melon	Cactus
Thistle, soft, or gentle	Carduus dissectus
Thistle, solstitial, or barnaby	Centaurea solstitialis
Thistle, sow, or hare's lettuce	Sonchus
Thistle, sow, or wild lettuce	Prenanthes
Thistle, downy sow ; or wooly hawkweed	Andryala lanata
Thistle, Torch	Cactus
Thistle, wooly, or cotton	Onopordon
Thongs	Fucus loreus
Thorn apple	Datura stramonium
Thorn, Black	Prunus spinosa
Thorn, Box	Lycium
Thorn, Christ's	Rhamnus spina christi
Thorn, Egyptian	Mimosa

Thorn,

Thorn, Evergreen ; or Pyracantha	Mespilus pyracantha
Thorn, Goat's ; or Tragacanth	Astragalus tragacantha
Thorn, Lily	Catesbæa spinosa
Thorn, Purging	Rhamnus catharticus
Thorn, Scorpion's ; or Gorse	Ulex europæus
Thorn, Spanish hedge-hog	Anthyllis erinacea
Thorn, White ; or Hawthorn	Catægus oxyacantha
Thorn plant, Burning	Euphorbia
Thorough wax	Bupleurum rotundifolium
Three-leaved grass	Trifolium
Thrift ; or Sea pink	Statice armeria
Throat-wort, Greater	Campanula latifolia
Throat-wort, lesser	Campanula glomerata
Throat-wort, blue umbelliferous	Trachelium cæruleum
Thyme, common	Thymus vulgaris
Thyme, Dodder of	Cuscuta epithymum
Thyme, Mastic	Thymus mastichina
Thyme, Mother of ; or Wild thyme ; or Basil	Thymus serpyllum
Tickseed	Coreopsis
Tickseed	Corispermum
Tiger's-foot	Ipomoea pes tigridis
Tinker's (Dr.) weed ; Fever- root ; or False ipecacuana	Triosteum perfoliatum
Toad, or Paddock-stool	Agaricus
Toad grass	Bufoia tenuifolia
Tobacco	Nicotiana tabacum
Tolu tree, Balsam of	Toluifera balsamum
Tomatoes	Solanum lycopersicon
Tooth-ach, or Pellitory, tree	Zanthoxylum
Tooth-pick ; or Visnaga	Daucus visnaga
Tooth-wort ; or Coral-wort	Dentaria
Tooth-wort ; or Lead-wort	Plumbago
Tormentil ; or Septfoil	Tormentilla erecta
Touch me not ; or Yellow jaf- mine	Impatiens noli tangere
Touch me not ; or Spurting cucumber	Momordica elaterium
Traveller's joy ; or Old man's beard	Clematis vitalba
Tree everlasting	Gnaphalium arboreum
Tree moss	Lichen
Trefoil	Trifolium
Trefoil, Bean	Cytisus

Trefoil, Stinking bean	<i>Anagyris fetida</i>
Trefoil, Hedge-hog	<i>Medicago polymorpha</i> (in- tertexta)
Trefoil, Bird's-foot	<i>Lotus</i>
Trefoil, Marsh ; or Bog-bean	<i>Menyanthes trifoliata</i>
Trefoil, Moon	<i>Medicago</i>
Trefoil, Shrub	<i>Ptelia trifoliata</i>
Trefoil of Montpellier, Shrub	<i>Lotus dorycnium</i>
Trefoil, snail	<i>Medicago prostrata</i>
Trefoil, thorny, of Candia	<i>Fagonia cretica</i>
Trefoil tree ; or Laburnum	<i>Cytisus laburnum</i>
Trefoil, Base tree	<i>Cytisus</i>
Trichomanes	<i>Asplenium trichomanes</i>
True love ; or Herb Paris	<i>Paris quadrifolia</i>
True love ; or Herb Paris of America	<i>Trillium</i>
Truffles	<i>Lycoperdon tuber</i>
Trumpet flower ; or Scarlet jas- mine	<i>Bignonia radicans</i>
Tuberose	<i>Polianthes tuberosa</i>
Tulip	<i>Tulipa</i>
Tulip, African ; or Blood-flower	<i>Hæmanthus</i>
Tulip, checquered	<i>Fritillaria meleagris</i>
Tulip tree	<i>Liriodendron tulipifera</i>
Tulip tree, Laurel-leaved	<i>Magnolia</i>
Turbith, Indian, or of the shops	<i>Convolvulus turbethum</i>
Turbith, Gargantic	<i>Thapsia garganica</i>
Turkey berries	<i>Solanum diphyllum</i>
Turkey blossom	<i>Tribulus terrestris</i>
Turn-hoof ; or Ground ivy	<i>Glechoma hederacea</i>
Turkey feather	<i>Ulva favonia</i>
Turk's cap ; or Martagon	<i>Lilium martagon</i>
Turk's head	<i>Cactus</i>
Turk's turban	<i>Ranunculus</i>
Turmeric	<i>Curcuma longa</i>
Turnep	<i>Brassica rapa</i>
Turnep, French (a variety)	<i>Brassica rapa</i>
Turnsol ; or wart-wort	<i>Heliotropium</i>
Turpentine tree	<i>Pistacia terebinthus</i>
Tupelo tree	<i>Nyssa aquatica</i>
Tutsan ; or park-leaves	<i>Hypericum androsæmum</i>
Twa, or Twy blade	<i>Ophrys</i>
Twopence, Herb ; or Moneywort	<i>Lyfimachia nummularia</i>
	Valerian,

V

Valerian, Garden	Valeriana phu
Valerian, Greek ; Jacob's ladder ; or Charity	Polemonium
Vanilla ; or Venetloe	Epidendrum vanilla
Varnish tree ; or Poison ash, or Oak	Rhus vernix
Venus's comb or Shepherd's needle	Scandix pecten
Venus's looking glass	Campanula speculum
Venus's navel-wort	Cynoglossum lusitanicum
Vernal grass	Anthoxanthum
Vervain	Verbena
Vervain, common ; or Simpler's joy	Verbena officinalis
Vervain mallow	Malva
Vetch, or Tare	Vicia
Vetch, Ax, or Hatchet	Coronilla securidaca
Vetch, Bitter	Ervum ervilia
Vetch, Bitter ; or Heath peas	Orobus
Vetch, Jointed podded bitter	Ervum lens
Vetch, Chichling	Lathyrus
Vetch, Crimson grass	Lathyrus nissolia
Vetch, Clusius's foreign hatchet	Biserrula pelecinus
Vetch, Horse-shoe	Hippocrepis
Vetch, Kidney ; or Lady's finger	Anthyllis
Vetch, Liquorice	Astragalus glycyphylus
Vetch, Knobbed-rooted liquorice	Glycine
Vetch, Milk	Astragalus
Vetch, Base milk	Phaca
Vetch, Venetian	Orobus
Vetch, Medic	Hedysarum
Vetchling	Astragalus onobrychia
Vetchling, Yellow	Lathyrus aphaca
Viburnum	Viburnum
Viburnum, American	Lantana
Vine tree	Vitis
Vine, Black ; or Black bryony	Tamus
Vine, Climbing five-leaved, of Canada ; or Virginian ivy, or Creeper	Hedera quinquefolia
Vine, Spanish arbour	Ipomoea tuberosa
Vine, White ; or White bryony	Bryonia alba

Violet,

Violet, Common	<i>Viola odorata</i>
Violet, Bulbous ; or Snowdrop	<i>Galanthus nivalis</i>
Violet, Calathian	<i>Gentiana</i>
Violet, Dames, Rocket ; or Queen's July-flower	<i>Hesperis</i>
Violet, Dog's-tooth	<i>Erythronium dens canis</i>
Violet, or Milfoil, Water	<i>Hottonia palustris</i>
Viper's graqs	<i>Scorzonera</i>
Virgin's bower, blue	<i>Clematis viticella</i>
Viorna	<i>Clematis viorna</i>
Visnaga ; or Tooth-pick	<i>Daucus visnaga</i>
Umbrella tree	<i>Magnolia tripetala</i>
Uva ursi ; or Bear berries	<i>Arbutus uva ursi</i>
Urine-wort	<i>Saxifraga hirculus</i>

W

Wagebroom	<i>Protea argentea</i>
Wake Robin	<i>Arum maculatum</i>
Wall flower	<i>Cheiranthus cheiri</i>
Walnut tree	<i>Juglans regia</i>
Walnut, Jamaica ; or Sandbox tree ; or Farting tree	<i>Hura crepitans</i>
Walnut, Virginian ; or Hiccory	<i>Juglans</i>
Wall wort ; Danewort ; or Dwarf elder	<i>Sambucus ebulus</i>
Wanhom	<i>Kæmpferia</i>
Ware, Sea	<i>Fucus vesiculosus</i>
Wart-wort	<i>Euphorbia tithymaloides</i>
Wart-wort ; or Turnsol	<i>Heliotropium</i>
Wart-wort ; or Nipple-wort	<i>Lapsana</i>
Water-leaf	<i>Hydrophyllum</i>
Water lemon	<i>Passiflora maliformis</i>
Water wort	<i>Elatine hydropiper</i>
Wayfaring ; or Pliant mealy tree	<i>Viburnum lantana</i>
Weed, Sweet ; or wild liquorice	<i>Capraria</i>
Weld, or Would ; or bale rocket	<i>Reseda</i>
Wheat	<i>Triticum</i>
Wheat, Buck	<i>Polygonum fagopyrum</i>
Wheat, Cow	<i>Melampyrum</i>
Wheat, French	<i>Polygonum</i>
Wheat, Turkey ; or Indian maize	<i>Zea</i>
Whin, Furze ; or Gorse	<i>Ulex europæus</i>
Whin, Petty ; or Cammock ; or Rest-harrow	<i>Ononis antiquorum</i>
	Whin,

Whin, Petty ; or small broom	Genista anglica
Whistles, Sea	Fucus nodosus
White beam, White leaf tree ; or Aria Theophrasti	Crataegus aria
White, or Milk wood	Bignonia leucoxydon
White wood, or white Cedar	Bignonia pentaphylla
Whitlow grass	Draba
Whitlow grass, common	Draba verna
Whitlow grass, Rue-leaved	Saxifraga tridactylites
Whortle-berry ; Red-worts ; or Billberry	Vaccinium myrtillus
Whortle-berry, or Bladder nut, African	Royena
Whorts, Black	Vaccinium
Whortle-berry, with flowers single	Vaccinium vitis idæa
Whorts, Bog or Moor : or Cran- berry	Vaccinium oxycoccos
Whorts, Spanish red, or Straw- berry tree	Arbutus unedo
Wicken, Quickbeam ; Mountain ash ; or Roan tree	Sorbus aucuparia
Widow-wail	Cneorum tricoccon
Willow	Salix
Willow, French ; or willow herb	Epilobium
Willow, spiked, of Theophrastus	Spiræa
Willow, or gale, sweet	Myrica gale
Willow herb, or Purple loofestripe	Lythrum
Willow herb, or Yellow loofestripe	Lyfimachia vulgaris
Willow herb, Rosebay	Epilobium angustifolium
Willow, weeping	Salix babylonica
Wind-flower ; or Anemone	Anemone
Wind-feed	Arctotis
Winter-berry	Prinos verticillatus
Winter-bloom	Azalea
Winter-green	Pyrola
Winter-green, Ivy flowering	Kalmia
Winter-green, with chickweed flowers	Trientalis europæa
Woad, Common	Isatis tinctoria
Woad, wild ; Dyer's or yellow weed	Refeda laureola
Wolf's bane ; or Aconite	Aconitum
Wolf's bane ; or winter aconite	Helleborus hyemalis
Wolf's claw	Lycopodium

Wood-

Woodbine ; or Honeyfuckle	Lonicera
Woodbine, Spanish ; or Arbour vine	Ipomoea tuberosa
Wood of life; or Lignum vitæ	Guaiacum
Woodroof	Asperula
Wood-waxen ; or Dyer's broom	Genista tinctoria
Worm-grass	Spigelia anthelmia
Worm-feed	Chenopodium anthelminti- cum
Wormwood	Artemisia absinthium
Wormwood, Sea	Artemisia maritima
Wormwood; wild ; or base fever- few	Parthenium hysterophorus
Whortle, Petroseline ; or Parsley	Apium petroselinum
Woundwort of Achilles	Achillea
Woundwort, Clown's	Stachys
Woundwort, or confound, Sa- racen's	Solidago
Woundwort, True Saracen's	Senecio farracenicus
Woundwort, downy	Amellus umbellatus
Wrack	Fucus
Wrack, Grass	Zostera

Y

Yam, or Yaum ; or Indian po- tatoe	Dioscorea bulbifera
Yapoon ; Cassina ; or South sea tea	Hex cassine
Yarrow (see Milfoil)	Achillea
Yellow-root	Hydrastis canadensis
Yellow-weed ; or wild woad	Reseda luteola
Yerva-mora ; or Golden rod tree	Bosca yerva mora
Yew tree, common	Taxus baccata

Z

Zacintha, or Warded succory	Lapsana zacintha
Zedoary, round	Kæmpferia rotunda
Zedoary, Long ; or Galangal	Kæmpferia galanga
Zerumbet, or wild ginger	Amomum zerumbet

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GLOSSARY;

EXPLAINING THE

TECHNICAL TERMS

IN

B O T A N Y;

IN ALPHABETICAL ORDER.

A

Abbreviatum *perianthium*, shortened, when the cup is shorter than the tube of the flower.

Abortiens *flos*, barren flowers, such as produce no fruit.

Abruptum *folium pinnatum*, winged leaves, ending without either foliole or cirrus.

Acaulis, without stalk or stem.

Acerosum *folium*, chaffy leaves, when they are linear and abiding, as in *Pinus*, *Abies*, and *Juniperus*.

Acicularis, needle-shaped, as in *Scirpus acicularis*.

Acinaciforme, falchion or Scimitar-shaped, as in *Mesembryanthemum acinaciforme*.

Acini, the small berries which compose the fruit of a mulberry or bramble.

Acotyledones, plants, whose seeds have no cotyledones or seminal leaves.

Aculei, prickles, fixed in the rind or surface of the bark.

Aculeatus *caulis*, a stalk; or stem, furnished with prickles.

Acuminatum *folium*, a leaf ending in a point.

Acutum *folium*, leaves terminating in an acute angle.

Qq

Adnatum

Adnatum folium, the disk of the leaf pressing close to the stem of the plant.

Adpressa folia, the disk of the leaf pressing towards the stem.

Adscendens caulis, a stalk or branch inclining upwards.

Adversum folium, when the sides of the leaf are turned towards the South.

Aggregatus flos, an assemblage of flowers coming in clusters.

Aggregata, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Ala, a wing, the side petals of a papilionaceous blossom, or a membrane added to a seed, stalk, &c.

Alatus petiolus, when the foot-stalk of a leaf is winged with membranes.

Album, the white substance that lies between the inner bark, and the wood of trees.

Alga flags, one of the seven families of plants.

Alterni rami folia, when they come out singly, and follow in gradual order.

Amentaceæ, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*, bearing catkins.

Amentum, a catkin.

Amplexicaule folium, embracing the stalk, when the base of the leaf embraces the stem sideways.

Anceps caulis, double edged, when a stalk is compressed, and forms two opposite acute angles.

Androgyna, plants bearing male and female flowers on the same root.

Angulatus caulis, angulated stalks.

Angustifolia, narrow-leaved.

Angiospermia, the second order in the class *Didynamia* of *Linnaeus*; containing plants whose seeds are covered with a capsule.

Annua radix, an annual root; that which lives but one year.

Anthera, the summit of the stamina bearing the pollen, and a part of the principal male organ of generation.

Apertura, an aperture, opening in some species of anthera.

Apetalus flos, having no petals or corolla.

Apex, the top or summit.

Aphyllus caulis, destitute of leaves.

Apophysis, an excrescence from the receptacle of the musci.

Appendiculatus petiolus, a little appendage hanging from the extremity of the foot-stalk.

Approximata folia, leaves growing near each other.

Arbor, a tree.

Arbustiva,

- Arbustiva**, a copse of shrubs or trees, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Arcuatum legumen**, arched, a pod that is curved or bent.
- Arillus**, the proper exterior coat of a seed that falls off spontaneously.
- Arista**, the beard of corn or grasses.
- Arma**, arms, weapons, one of the seven kinds of fucinae of plants.
- Articulatus caulis**, culmus, having knots or joints.
- Articulus culmi**, the straight part of the stalk between the two joints.
- Asperifoliae**, rough-leaved plants, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Affurgentia folia**, first bent down, but rising erect towards the apex.
- Attenuatus pendunculus**, when the foot-stalk grows smaller towards the flower.
- Auctus calyx** augmented, having a series of distinct leaves, shorter than its own, that surround its base.
- Avenia folia**, leaves which have no visible veins.
- Auriculatum folium**, an ear-shaped leaf, when the leaf towards the base has a lobe on each side.
- Axillaria folia**, growing out of the angles formed by the branches and the stem.

B

- Bacca**, a berry; or a pulpy pericarpium without valves, in which the seeds are naked.
- Barba**, a beard, a species of pubescence, sometimes on the leaves of plants, as on the *Melembryanthemum barbarum*.
- Barbatum folium**, when a bunch of strong hairs terminate the leaves.
- Bicornes**, plants whose anthers have the appearance of two horns. Likewise an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Biennis radix**, a root which continues to vegetate two years.
- Bifaria folia**, a leaf pointing two ways.
- Biferæ plante**, flowering twice a year.
- Bifidum folium**, divided or cloven into two parts.
- Biflorus pedunculus**, bearing two flowers on a foot-stalk.
- Bigeminum folium**, a forked footstalk, with two little leaves on the apex of each division.
- Bijugum folium**, a winged leaf, bearing two pair of foliola.
- Bilabiata corolla**, a corolla with two lips.

- Bilobum folium*, a leaf consisting of two lobes.
Binata, folia, a digitate leaf, consisting of two foliola.
Bipartitum folium, a leaf divided into two segments.
Bipinnatum folium, doubly winged, when the folioles of a pinnate leaf are pinnate.
Biternatum folium, when there are three folioles on a petiole, and each foliole is ternate; as in *Epimedium*.
Bivalve pericarpium, consisting of two valves, as in the *Siliqua* and *Legumen*.
Brachiatus caulis, branching in pairs; each pair standing at right angles with those above and below.
Brachium, the arm, tenth degree in the *Linnean* scale for measuring plants, being twenty-four Parisian inches.
Bractæa, a floral leaf, these are generally of a different shape and colour from the other leaves of the plant, and are always seated near the fructification.
Bracteatus, having a bractea growing out of it.
Bulbiferous caulis, a stalk bearing bulbs, as in a species called *Lilium bulbiferum*.
Bulbosa radix, a bulbous root, and is either *squamosa*, scaly, as in *Lilium*; *tunicata*, coated, as in *Cepæ*; *duplicata*, double, as in *Fritillaria*; or *solida*, as in *Tulipa*.
Bullatum folium, when the surface of the leaf rises above the veins, so as to appear like blisters.

C

- Caducus calyx*, to fall off; a term signifying the shortest time of duration, falling off at the first opening of the flower.
Calamarizæ, a reed, and order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Calcariatum nectarium, a kind of nectarium resembling a spur, as in the *Delphinium*.
Caliculatus calyx, a little calyx added to a larger one, as in the *Coreopsis*, *Leontice*, &c.
Calycanthemi, a calyx, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Calyptra, a veil, in mosses, where it is placed over the Antheræ.
Calyx, a flower cup, of which there are the following kinds, viz. *perianthium*, *involucrum*, *amentum*, *spatha*, *gluma*, *calyptra*, and *volva*.
Campanacei, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Campanulata

- Campanulata corolla*, bell shaped flowers.
- Canaliculatum folium*, leaves having a deep channel running from the base to the apex.
- Candelares*, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Capilaceum folium*, capillary, exemplified in the *Ranunculus aquatilis*.
- Capillaris pappus*, hairy down, as in *Hieracium*, and *Sonchus*.
- Capillus*, hair, the first degree of the *Linnaean* scale for measuring plants, the diameter of a hair, and the twelfth part of a line.
- Capitati flores*, flowers collected into heads, as in *Mentha aquatica*, and *Thymus serpyllum*.
- Capitulum*, a little head, a species of inflorescentia in which the flowers are connected into close heads on the tops of the peduncles, as in *Gomphrena*.
- Capreolus*, a tendril, see *cirrus*.
- Capsula*, a capsule, a hollow pericarpium, which cleaves, or parts in some determinate manner, and consists of *valvula*, *dissipimentum*, *columnella*, and *loculamentum*.
- Carina*, the keel of a boat, or ship, the lower petal of the papilionaceous corolla.
- Carinatum folium*, when the back of the leaf resembles the keel of a ship.
- Cariophyllæus flos*, clove-tree, or flowers growing in the manner of carnations.
- Carnosum folium*, a fleshy leaf, as in *Sedum dasyphyllum*.
- Cartilagineum folium*, a leaf whose brim is furnished with a margin of different substance from the disk.
- Caryophylli*, carnations or pinks, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Catenulata scabrities*, a species of glandular roughness, hardly visible to the naked eye, resembling little chains on the surface of some plants.
- Caudex*, the stem of a tree.
- Caulescens*, having a stalk or stem.
- Caulina folia*, leaves growing immediately on the stem.
- Caulis*, a stem, a species of *truncus*.
- Cernuus*, nodding, or hanging down its head.
- Cespitosa*, plants which produce many stems from one root, and form a surface of turf or sod.
- Ciliatum*, whose margin is guarded by parallel bristles, formed like the eye-lash.
- Circinalæ folia*, a hoop or ring, a term of foliation, expressive

- live of the leaves within the gemma, being rolled spirally downward.
- Circumscilla capsula*, cut transversely, as in *Anagallis*.
- Cirrhiferus pedunculus*, a peduncle bearing a tendril, as in *Vitis*.
- Cirrhosum folium*, a leaf that terminates in a tendril, as in *Gloriosa*.
- Cirrhus*, a clasper or tendril, one of the fulcra of plants.
- Classis*, a class, is defined by *Linnaeus* to be an agreement of several genera in the parts of fructification, according to the principles of nature distinguished by art.
- Clavatus petiolus*, peduncles, when the footstalk of the leaf or flower is club-shaped, tapering from the base to its apex.
- Clavicula*, a little key, a tendril.
- Claus corolla*, when the neck of the corolla is close shut in with valves.
- Coadunata*, to gather together, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Coarctati rami*, close together, opposed to divaricatus.
- Cochleatum legumen*, a pod like the shell of a snail, as in *Medicago*.
- Coloratum folium*, coloured, when leaves, which are generally green, are of a different colour.
- Columnella*, a little column, the substance that passes through the capsule, and connects the several partitions and seeds.
- Columniferi*, pillar-shaped, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Coma*, a bush, or head of hair, a species of fulcra, composed of large bractæ, which terminates the stalk, as in *Lavandula*, *Salvia*, &c.
- Communis gemma*, regards the contents of the gemma, containing both flower and fruit.
- Communis calyx*, when a cup contains both receptacle and flower.
- Comosæ*, a head of hair, an order of plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Comosa radix*, the fibres which put forth at the base of a bulbous root, resembling a head of hair.
- Compactum folium*, when the leaf is of a compact and solid substance.
- Complectus flos*, having a perianthium and corolla.
- Compositus caulis*, a compound stem, diminishing as they ascend.
- Compositum folium*, when the petiole bears more than one leaf, of which are the following species, viz. articulaturn, digitatum,

- digitatum, conjugatum, pedatum, pinnatum, decompositum, supra-decompositum.*
- Compositi**, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Compressus caulis, folium**, a leaf resembling a cylinder compressed on the opposite sides.
- Concavum folium**, hollowed, the margin forms an arch with the disk.
- Conceptaculum**, a conceptacle, or receiver, a pericarpium of a single valve, which opens on the side lengthways, and has not the seeds fastened to it.
- Conduplicatum folium**, doubled together when the sides of the leaf are parallel, and approach each other.
- Conferti rami**, branches crowded together.
- Confertus verticillus, flos, et folia**, when flowers and leaves are formed into whorles round the stalk and crowded together.
- Confluentia folia**, to flow together, as in the pinnated leaf, when the pinnae run into one another.
- Conglobatus flos**, when flowers are collected into globular heads.
- Conglomeratus flos**, flowers irregularly crowded together.
- Congesta umbella**, flowers collected into a spherical shape, as in the *Allium*.
- Conica scabrities**, a species of setaceous scabrities, scarce visible to the naked eye, on the surface of plants, formed like cones.
- Coniferae**, plants bearing cones, such as *Pinus*, *Cupressus*, &c. an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Conjugatum**, to join or couple together, a species of pinnate leaf, where the folioles come by pairs.
- Connatum**, to grow together, when two opposite leaves unite at their base, so as to have the appearance of one leaf.
- Connivens corolla**, when the apices of the petals converge, so as to close the flower, as in *Trollius europæus*.
- Conniventes antheræ**, approaching or inclining together.
- Continuum folium**, continued, when the leaf appears to be a continuation of the substance of the stalk.
- Contorti**, to twist, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Contrariæ valvula**, valves are termed contraria, when the dissepimentum is placed transversely between them.
- Convexum folium**, a leaf rising from the margin to the center of the leaf.

Convolutus

- Convolutus cirrhus*, a tendril twining in the same direction with the sun's motion.
- Convolutum folium*, a term in foliation, when the leaf is rolled up like a scroll of paper.
- Conus*, see *strobilus*.
- Corculum*, the heart and essence of the seed.
- Cordatum folium*, a heart-shaped leaf.
- Cordiformis*, shaped like a heart.
- Corolla*, a wreath or crown, one of the seven parts of fructification.
- Corollula*, a little corolla.
- Corona seminis*, a crown adhering to many kinds of seeds, serving them as wings, which enables them to disperse.
- Coronariæ*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Coronula* a little crown.
- Cortex*, the outer rind or bark of vegetables.
- Corydales*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Corymbus* is a kind of spike, the flowers of which have each its proper pedicellus, or partial foot-stalk, raised to a proportional height, as in *Spiræa opulifolia*.
- Cotyledon*, a side lobe of the seed, a porous substance and perishable, or seminal leaves.
- Crenatum folium*, a notched leaf, when the margin is cut into angles that points towards neither of the extremities, obtusely crenate, when the angles are rounded, or acutely crenate, when the angles are pointed.
- Crispum folium*, a curled leaf, when the circumference becomes larger than the disk admits of.
- Cristatus flos*, when the flower has a tufted crest, as in *Polygala*.
- Cruciformes flores*, cross-shaped flowers, consisting of four petals, disposed in the form of a cross, as in the class *Tetradynamia* of Linnæus.
- Cryptogamia*, hidden marriages, the twenty-fourth class of the Linnæan system.
- Cubitus*, a cubit, the ninth degree of the Linnæan scale for measuring plants, from the elbow to the extremity of the middle finger, or seventeen Parisian inches.
- Cucullatum folium*, leaves rolled up lengthways, in form of a cone, as in *Geranium cucullatum*, &c.
- Cucurbitaceæ*, gourds, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Culminæ,

Culminia, the top or crown of any thing, an order of plants in the *Fragmenta methodi naturalis* of Linnaeus.

Culmus, a reed or straw, the proper stem or trunk of a grass.

Cuspidatum folium, a leaf whose apex resembles the point of a spear or lance.

Cuneiforme folium, a wedge-shaped leaf.

Cyathiformis corolla, flowers of the form of a cup.

Cylindracea spica, a spike of flowers in form of a cylinder.

Cyma, that runs into long fastigate peduncles, proceeding from the same universal center, but with irregular partial ones.

Cymosus flor, see *Cyma*.

Cymosa, an order of plants in the *Fragmenta methodi naturalis* of Linnaeus.

D

Dædaleum folium, a leaf whose texture is remarkably beautiful and exquisitely wrought.

Debilis caulis, a weak, feeble stalk.

Decagynia, ten females, the fifth order in the tenth class; flowers that have ten stamens.

Decandria, ten males, the tenth class of Linnaeus.

Decaphyllus calyx, a calyx consisting of ten leaves.

Deciduum folium, leaves that fall off in winter.

Declinatus caulis, a stalk bending towards the earth.

Decomposita folia, when a petiole once divided connects many folioles.

Decumbens, to lie down.

Decurrens folium, running down, when the base of a sessile leaf extends itself downwards along the stem, beyond the proper base or termination of the leaf.

Decursive folium pinnatum, when the bases of the foliole are continued along the sides of the petiolus.

Decussata folia, divided, when leaves grow in pairs, and opposite, each pair being opposite alternately.

Deflexus ramus, a branch bent a little downwards.

Deflorata stamina, having shed or discharged the farina fecundans.

Defoliatio, the time in autumn when plants shed their leaves.

Deltoides folium, a leaf formed like the Greek Delta, as in *Mesembryanthemum deltoides*.

Demersum folium, in aquatic plants, leaves sunk below the surface of the water.

Dendroides furculus, shrub-like, a subdivision of the *Sarculus* in the genus *Hypnum*.

- Dentatum folium*, leaves having horizontal points of the same consistence with the leaf, and standing at a little distance from each other.
- Denudatæ*, stripped naked, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Dependens folium*, to hang down, leaves pointing towards the ground.
- Depressum folium*, pressing down, when the sides rise higher than the disk.
- Diadelphia*, two brotherhoods, the seventeenth class in the sexual system.
- Diandria*, two males, the second class in the sexual system.
- Dichotomus caulis*, forked stalks, when the divisions come by two and two.
- Dicotyledones*, when the seeds have two cotyledons that are the placenta of the embryo plant, and afterwards the seed leaves.
- Didyma anthera*, twins, when the anthera comes by two's on each filament.
- Didynamia*, the superiority of two, the fourteenth class in the sexual system.
- Difformia folia*, different forms, when leaves on the same plant come of different forms.
- Diffusus caulis*, when branches of the stalk spread different ways.
- Digitatum folium*, fingered, when the apex of a petiole connects many folioles.
- Digynia*, two females, the second order in each of the first thirteen classes, except the ninth.
- Dimidiatum*, halved.
- Dioecia*, the twenty second class in the sexual system.
- Dipetala corolla*, flowers consisting of two petals, as in *Circæa*, and *Commelina*.
- Diphyllus calyx*, a calyx consisting of two leaves, as in the *Papaver*, and *Fumaria*.
- Discus*, a disk, the middle part of a radiate compound flower.
- Disperma*, plants producing their seeds by two's, as in the *Umbellatæ*.
- Dissectum folium*, leaves cut into laciniae, or divisions.
- Dissepimentum*, partitions of the fruit, which divide the pericarpium into cells.
- Diffiliens siliqua*, pods that burst with elasticity.
- Distans verticillus*, when the whorles of flowers, in verticillate plants, stand at a great distance from one another.

- Difficha folia*, in two rows, when the leaves all respect two sides of the branches only.
- Divaricati rami*, branches standing wide from each other in different directions.
- Divergentes rami*, widening gradually.
- Dodecandria*, twelve males, the eleventh class in the sexual system.
- Dodrans*, the seventh degree in the Linnæan scale for measuring the parts of plants, or nine Parisian inches.
- Dodrantalis*, nine inches.
- Dolabriforme folium*, a leaf resembling an axe, as in *Mesembryanthemum dolabriforme*.
- Dorsalis arista*, an awn, or beard, fixed to the back or external part of the Gluma.
- Drupa*, a pulpy pericarpium, without valves, containing a stone, as in the Plum and Peach.
- Drupaceæ*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Dumosæ*, a bush, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Duplicata radix*, a double root, a species of bulbous root, consisting of two solid bulbs, as in some species of *Orchis*.
- Duplicato-ferratum folium*, sawed double, with lesser teeth within the greater.

E

- Ebracteatus racemus*, without a Bractea, or floral leaf.
- Ecaudata corolla*, without a tail or spur, as in *Antirrhinum cymbalaria*.
- Echinatum pericarpium*, pods beset with prickles, like a hedgehog.
- Efflorescentia*, the precise time when a plant shews its first flowers.
- Emarginatum folium*, when the apex of a leaf terminates in a notch; the same may be applied to petals, and stigma.
- Enervium folium*, leaves having no apparent nerves.
- Enneandria*, nine males, the ninth class in the sexual system.
- Enneapetala corolla*, a flower consisting of nine petals.
- Enodis, caulis, culmus*, stalks and straws, having no knots or joints.
- Ensateæ*, plants having sword-shaped leaves, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Rr 2

Ensi-

Empalement. viz. Calyx.

- Ensiforme folium*, leaves shaped like a two-edged sword, tapering towards the point.
Equitantia folia, riding, when the sides of the leaves approach in such a manner as the outer embrace the inner.
Erectus caulis, ramus, folium, upright, perpendicular.
Erosum folium, gnawed, when the leaf is sinuate, and the margin appears as if it were gnawed or bitten.
Exserta stamina, standing forth, when the stamina appear above the corolla.
Exstipulatus, without stipulæ.
Exsuccum folium, when the substance of the leaf is dry.
Extrafoliaceæ stipulæ, stipulæ growing on the out-side of the leaves.

F

- Fartum folium*, stuffed, opposed to *Tubulosum*.
Fasciculata folia, bundled, leaves growing in bunches.
Fascicularis radix, bundled, tuberous roots growing in bundles.
Fasciata planta, when many stalks grow together, like a fagot or bundle.
Fastigiati pedunculi, pedunculi pointed at the apex.
Fauces, the jaws or chops.
Femina planta, a plant bearing female flowers on the same root only.
Fibrosa radix, a fibrous root.
Filamentum, a thread, applied to the thread-like part of the stamina.
Filices, ferns, one of the seven divisions of the vegetable kingdom, and an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Filiform, filamentum, thread-shaped stamina.
Fimbriata petala, a fringed petal, as in *Menyanthes*.
Fissum folium, a leaf split or cloven half-way down.
Fistulosus caulis, a piped or hollow stem.
Fiabellatum folium, a fan-shaped leaf.
Flaccidus pedunculus, the footstalk of a flower that is feeble and slender.
Flagellum, a twig or shoot, like a whip or thong.
Flexuosus caulis, a stalk having many turnings or bendings, taking a different direction at every joint.
Floralia folia, floral leaves that immediately attend the flower.
Floralis gemma, flower-buds.
Flos, a flower.
Flosculus, a little flower.

- Foliaceæ glandule*, glands growing on the leaves.
Foliaris cirrus, a tendril growing from a leaf.
Foliaris gemmæ, leaf-buds.
Foliatio plantæ, the complication of the leaves, whilst folded within the gemma or bud.
Foliatus caulis, a leafy stalk.
Folifera gemma, a bud producing leaves.
Foliolum, a little leaf, one of the single leaves, which together constitute a compound leaf.
Foliofum capitulum, covered with leaves amongst the flowers or tops of the plants.
Folium, a leaf.
Fornicatum petalum, vaulted or arched, as in the upper lip of the flowers in the class didynamia.
Frequens planta, plants growing frequently, or commonly, every where.
Frondefcentia, the season of the year when the leaves of plants are unfolded.
Frondosus caudex, a species of trunk composed of a branch and a leaf blended together, as is frequently united with the fructification.
Fructefcentia, the time of the year when a plant scatters its ripe seeds.
Fructificatio, the temporary part of a vegetable appropriated to generation, terminating the old vegetable and beginning the new.
Frustranea polygamia, to no purpose, the third order of the class syngenesia.
Frutex, a shrub.
Fruticosus caulis, a shrubby stalk.
Fugacissima petala, petals that are fleeting, and of short duration.
Fulcratus caulis, branches having props, see *Fulcrum*.
Fulcrum, a prop or support.
Fungi, a kind of mushroom, one of the seven families of plants, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Furcata, forked.
Fusiform radix, a spindle-shaped root.

G

Galea, an helmet, applied to the corolla of the class Gynandria, as in *Orchis*.

Galeatum

- Galeatum labium*, the lip of a flower shaped like an helmet.
Geminæ stipulæ, stipulæ growing in pairs.
Geminatus pedunculus, double footstalks growing from the same point.
Gemma, a bud, an hibernaculum on the ascending caudex.
Gemmatio, a young bud.
Gemmiparus, bearing buds.
Genera plantarum, genera of plants, the second subdivision in the Linnæan system; it comprehends an assemblage of species, similar in their parts of fructification, under the same class and order.
Geniculatus caulis, oulmus, pedunculus, a jointed stalk, straw, or footstalk of a flower.
Genicula, little joints.
Germen, a sprout or bud, the base of the pistillum, the rudiment of the fruit yet in embryo.
Gibbum folium, bunching out, or gouty.
Glaber, smooth, having an even surface.
Gladiata siliqua, a sword-shaped pod.
Glandulæ, a gland, or secretory vessel.
Glandulifera scabrities, a kind of bristly roughness on the surface of some plants, on which there are minute glands at the extremity of each bristle.
Glareosis locis, gravelly places, where plants delight in gravel.
Glaucophyllus, a bluish, or azure-coloured leaf.
Globosa radix, a round root.
Globularis scabrities, a species of glandular roughness scarce visible to the naked eye, the small grains of which are exactly globular.
Glochoides, the small points of the pubes of plants. Linnæus applies this term, only, to the hami triglochoids, with three hooked points.
Glomerata spica, flowers crowded together in a globular form.
Gluma, a husk, or chaff, a species of calyx peculiar to corn and grasses.
Glutinositas, like glue or paste.
Gramina, grasses, one of the seven families of the vegetable kingdom.
Granulata radix, roots consisting of many little knobs, like seeds or grain, attached to one another by small strings, as in *Saxifraga granulata*.
Gymnospermia, naked-seeded, the first order of the class *Didynamia*.
Gynandria,

Gynandria, when the male and female parts are joined together, the twelfth class in the Linnæan system.

H

Habitualis *character*, the character or description of a plant, taken from its habit, which consists in the placentatio, radication, ramificatio, foliatio, stipulatio, pubescentia, inflorescentia.

Habitus, the external appearance : Linnæus defines it, the conformity or affinity that the congeners of vegetables have to one another, in placentation, radication, &c.

Hamosa *feta*, hooked bristles.

Hastatum *folium*, leaves resembling the head of a spear or halbert.

Hemisphericus *calyx*, half round, or half a sphere.

Heptandria, seven males, the seventh class of the sexual system.

Herba, an herb, according to Linnæus, it is the part of the vegetable which arises from the root ; it is terminated by the fructification, and comprehends the stem, leaf, props, and hibernacula.

Herbaceæ *plantæ*, are perennial plants, which annually perish down to the root.

Herbaceus *calyx*, stalks that dry annually.

Hermaphroditus *flos*, flowers that contain both sexes, as anthera, and stigma.

Hesperidæ, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Hexagonus *caulis*, a stalk with six angles.

Hexandria, the sixth class in the sexual system, which produce hermaphrodite flowers, with six stamina of equal length.

Hexagynia, an order of plants that produces six styles.

Hexapetala *corolla*, flowers consisting of six petals.

Hexaphyllus *calyx*, a flower cup consisting of six leaves.

Hians *corolla*, a monopetalous flower that is gaping.

Hirsutus, rough, hairy.

Hispidus *caulis* a stalk covered with strong fragile bristles.

Holeraceæ, pot herbs, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Horizontalis *flos*, flowers growing with their disk parallel to the horizon.

Hybernaculum, winter-lodge, the part of a plant that incloses and secures the embryo from external injuries.

Hybrida,

- Hybrida**, a bastard, a monstrous production of two plants of different species, like the mule in the animal creation.
Hypocrateriformis corolla, a monopetalous flower, shaped like a cup or salver.

I

- Icosandria**, the twelfth class in the sexual system.
Imberbis corolla, a flower without a beard.
Imbricatus, tiled, when the scales of a stalk, or flower cup, lie over one another in the manner of tiles upon a house.
Immutatæ, unaltered.
Inæqualis corolla, an unequal flower.
Inanis caulis, hollow or empty stalks.
Incanum folium, leaves covered with whitish down.
Incisum folium, leaves cut into irregular segments.
Incompletus flos, imperfect flowers without petals.
Incrassatus pedunculus, footstalks of flowers that increase in thickness as they approach the flowers.
Incumbens anthera, anthera which is fixed to the filament sideways.
Incurvatus caulis, a stalk bowed towards the earth.
Indivisum folium, an intire undivided leaf.
Inerme folium, unarmed, a leaf without bristles or prickles.
Inferus flos, flowers whose receptacle are situated below the germen.
Inflatum perianthium, a calyx puffed out like a bladder.
Inflexa folia, leaves bending inward towards the stem.
Inflorescentia, inflorescence signifies the various modes in which flowers are joined to the plant by the pedunculus.
Infundibuliformis corolla, a monopetalous flower shaped like a funnel.
Insertus petiolus, a foot-stalk inserted into the stem.
Integrum folium, an intire undivided leaf.
Integerrimum folium, an intire leaf, whose margin is destitute of incisions or serratures.
Interfoliaceus pedunculus, flower-stalks arising from between opposite leaves.
Interruptum folium pinnatum, when the large folioles of a winged leaf are interrupted alternately by pairs of smaller ones.
Interrupta spica, a spike of flowers, interrupted or broken by small clusters of flowers between the larger ones.
Intorsio, writhing or twisting.

Intra-

Intrafoliaceæ stipulæ, stipulæ, growing on the inside of the leaves of the plant.

Inundata loca, this term is applied by Linnæus to such places as are overflowed only in winter.

Involucellum, a partial involucre.

Involucreum, a cover, the calyx of the umbelliferous plants standing at a distance from the flower.

Involuta folia, rolled in, leaves when their lateral margins are rolled spirally inwards on both sides.

Irregularis flos, irregular flowers of deformed shapes.

Juba, a crest of feathers.

Julus, a katkin.

L

Labiatus flos, a lipped flower.

Lacerum folium, a cleft, or fissure, leaves whose margin is cut into irregular segments, as if rent or torn.

Lacinix, segments or incisions.

Laciniatum folium, a leaf cut into irregular incisions.

Lactescentia, milky, those plants are called milky, whose juices are white, yellow, or red.

Lacunosum folium, leaves that are deeply furrowed, by the veins being sunk below the surface.

Lacustris planta, plants which grow in lakes of water.

Lamina, a thin plate, the upper expanded part of a polypetalous flower.

Lana, wool, a species of pubescence, which covers the surface of plants.

Lanatum folium, a wooly leaf.

Lanceolatum folium, a lance-shaped leaf.

Laterales flores, flowers coming from the sides.

Laxus caulis, loose, weak, slender.

Legumen, pulse, a pericarpium of two valves, in which the seeds are fixed along one suture only.

Lenticularis scabrities, a species of glandular scabrities, in the form of lentils.

Leprosus, spotted like a leopard, exemplified in Lichen.

Lævis caulis, smooth, having an even surface.

Liber, the inner rind or bark of a plant.

Lignosus caulis, a woody stem.

Lignum, wood.

Ligulatus flos, when the petals, tubulated at the base, are plane and linear towards the middle, and widest at the extremity, in form of a bandage.

- Liliaceæ**, like a lily, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Limbus**, a border; the upper expanded part of a monopetalous flower.
- Linea**, a line, the second degree in the Linnæan scale for measuring plants, the twelfth part of an inch.
- Lineare folium**, a narrow leaf, whose opposite margins are almost parallel, as in *Pinus*.
- Lineatum folium**, leaves whose superficies are marked with parallel lines, running lengthways.
- Lingulatum folium**, a leaf shaped like a tongue.
- Lobatum folium**, when leaves are divided to the middle into parts that stand wide from each other, and have their margins convex.
- Loculamentum**, a cell, the divisions of that species of pericarpium called a capsula.
- Locus foliorum**, the particular part of the plant to which the leaf is affixed.
- Lomentaceæ**, bean meal, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Longiusculus**, longish.
- Longum perianthium**, when the tube of the calyx is equal in length to that of the corolla.
- Lucidum folium**, clear, shining.
- Lunatum folium**, moon-shaped leaves, when they are round and hollowed at the base like a half moon.
- Lunulate**, shaped like a crescent.
- Luridæ**, pale, wan, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Luxurians flos**, a luxuriant flower.
- Lyratum folium**, leaves shaped like a harp or lyre.

M

- Marcescens**, *corolla*, flowers withering on the plant.
- Margo folii**, the margin or edge of the leaf.
- Mas planta**, male plants, see class Dioecia.
- Masculus flos**, male flowers, containing antheræ, but no stigma.
- Medulla**, marrow, the pith or heart of a plant.
- Membranaceum folium**, when the leaves have no distinguishable pulp between their surfaces.
- Membranatus caulis**, a stalk covered with thick membranes.
- Monadelphia**, one brother, the sixteenth class in the sexual system.
- Monandria**, one male, the first class in the sexual system.

Mono-

- Monocotyledones**, a term in placentation, applied to plants whose seeds have a single cotyledon.
- Monoecia**, one house, the twenty-first class in the sexual system.
- Monogynia**, one female, the first order of the first thirteen classes in the Linnæan system.
- Monopetala corolla**, a flower having one petal.
- Monophyllum involucrum**, consisting of one leaf.
- Monosperma**, having one seed.
- Miliaris scabrities**, a species of glandular roughness appearing on the surface of some plants like grains of millet.
- Mucronatum folium**, a leaf terminating in a sharp point.
- Multifidum folium**, a leaf divided into many linear segments or divisions.
- Multiflorus pedunculus**, a footstalk bearing many flowers.
- Multipartitum folium**, a leaf divided into many parts.
- Multiplicatus flos**, a luxuriant flower, whose corolla is multiplied so as to exclude some of the stamina.
- Multifiliquæ**, many pods, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Muricatus caulis**, a stalk whose surface is covered with sharp points, like the Murex shell.
- Muricatæ**, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Mulci**, mosses, one of the seven families in the vegetable kingdom, and an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Mutica gluma**, when the arista is wanting.
- Mutilatus flos**, a mutilated flower.

N

- Natans folium**, a leaf which swims on the surface of the water.
- Navicularis valvula**, when the valve of the seed vessel resembles a ship.
- Necessaria polygamia**, necessary marriages, the fourth order of the nineteenth class in the sexual system.
- Nectarium**, that part of the corolla that contains the honey juice.
- Nervosum folium**, leaves whose surface is full of nerves or strings.
- Nidulantia femina baccarum**, seeds nestling in the pulp of a berry.
- Nitidum folium**, a bright, shining, glossy leaf.
- Nucamentacæ**, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

- Nucleus, a kernel.
 Nudus *caulis*, a naked stalk.
 Nutans *caulis*, a nodding stalk.
 Nux, a nut.

O

- Obovatum *petalum*, a heart-shaped petal, with its apex downwards.
 Obliquum *folium*, when the apex of the leaf points obliquely towards the horizon.
 Oblongum *folium*, an oblong leaf.
 Obsolete *lobatum folium*, leaves having lobes scarce discernable.
 Obtusum *folium*, leaves blunt, or rounded at the apex.
 Obvolutum *folium*, rolled against each other, when their respective margins alternately embrace the straight margin of the opposite leaf.
 Octandria, eight males, the eight clafs in the sexual system.
 Officinalis, plants used in medicine, and kept in the apothecaries shops.
 Operculum, a cover, as in the mosses.
 Oppositi *rami folia*, branches and leaves that grow by pairs opposite to each other.
 Orbiculatum *folium*, round leaves.
 Orchideæ, *orchis*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
 Ordo, order.
 Orgya, a fathom or six parisian feet.
 Ovale *folium*, an oval leaf.
 Ovarium, the germen.
 Ovatum *folium*, an oval, or egg-shaped leaf.

P

- Pagina *folii*, the surface of a leaf.
 Palea, chaff, a thin membrane rising from a common receptacle which separates the flosculi.
 Paleaceus *pappus*, chaffy down.
 Palmæ, palms, one of the seven families of the vegetable kingdom.
 Palmata *radix*, a handed root, as in Orchis.
 Palmatum *folium*, a leaf shaped like an open hand.
 Palustris, marshy or fenny.
 Panduriforme *folium*, shaped like a guitar, a musical instrument so called.

Panicula

- Panicula**, a panicle, or loose spike of grass.
- Papilionaceus**, butterfly-shaped flower, as in the class *Diadelphia* of Linnæus.
- Papilionaceæ**, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Papillosum folium**, a nipple, a leaf covered with dots or points like nipples.
- Pappus**, down.
- Papulosum folium**, a leaf, whose surface is covered with pimples.
- Parabolicum folium**, a leaf in form of a parabola.
- Parallelum dissepimentum**, when the dissepiments are parallel to the sides of the pericarpium.
- Parasitica planta**, plants that only grow out of other plants, as the *Viscum*.
- Partialis umbella**, a partial umbel.
- Partiale involucrum**, when at the base of the partial umbel.
- Partitum folium**, a divided leaf.
- Parvum perianthium**, a little flower cup, or comparatively small, opposed to magnum.
- Patens caulis, ramus, &c.** spreading stalks and branches.
- Patulus calyx**, a spreading cup.
- Pauciflorus**, having few flowers.
- Pedalis caulis**, a stalk a foot in height.
- Pedatum folium**, a species of compound leaf, whose divisions resemble the toes of a foot, as in *Helleborus scetidus*.
- Pedicellus**, a little footstalk.
- Pedicularis cirrhus**, a tendril proceeding from the footstalk of a flower.
- Pedunculati flores**, flowers growing on footstalks.
- Pedunculus**, the footstalk of a flower.
- Peltatum folium**, when the footstalk is inserted into the disk of the leaf, and not into its base.
- Penicilliformia stigmata**, a stigma in form of a Painter's pencil.
- Pentagonus caulis** a five angled stalk.
- Pentagynia**, five females, the fifth order of a class.
- Pentandria**, five males, the fifth class in the sexual system of Linnæus.
- Pentapetala, corolla**, a flower consisting of five petals.
- Pentaphyllus calyx**, a calyx consisting of five leaves.
- Perennis radix**, a perennial root, continuing for many years.
- Perfectus flos**, flowers having petals, the perfect flowers of Ray, Tournefort, and other botanists.
- Perfoliatum folium**, when the base of the leaf intirely surrounds the

the stem, or when the stalk grows through the center of the leaf, as in *Crassula perfoliata*.

Perforati cotyledones, to be pierced through, a species of the monocotyledones exemplified in the gramina; also an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Perianthium, a kind of calyx, so called when contiguous to the fructification.

Pericarpium, a species of pod that contains the seed.

Perichætiæ, a modification of the receptaculum in the musci and algæ.

Perpendicularis radix, a perpendicular, or downright root.

Personatæ, masked, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Pes, a foot.

Petaliformia stigma, a stigma resembling the shape of a petal.

Petalodes flos, a flower having petals.

Petalum, the corollaceous teguments of a flower.

Petiolearis cirrhus, a tendril proceeding from the footstalk of a leaf.

Petiolatum folium, a leaf growing on a footstalk.

Petiolus, a little footstalk.

Pileus, a hat or bonnet, the orbicular expansion of a mushroom, which covers the fructification.

Pili, hairs.

Pilosum folium, leaves whose surface is covered with long distinct hairs.

Pinnatifidum folium, (a winged leaf) applied to simple leaves whose lacinix are transverse to the rachis.

Pinnatum folium, a winged leaf.

Piperitæ, pepper, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Pistillum, the stile or female organ of generation, whose office is to receive and secrete the farina fecundans.

Pixidatum folium, a kind of foliage, where one leaf is let in to another by a joint, as in *equisetum*.

Placentatio cotyledones, of the seed.

Planipetalus flos, a flower with plain flat petals.

Plantæ, plants, one of the seven families of vegetables, comprehending all which are not included in the other six tribes.

Planum folium, plain flat leaves.

Plenus flos, a full or double flower.

Plicatum folium, a plaited leaf.

Plumata

- Plumata seta*, a feathered hair or bristle.
Plumosus pappus, a kind of soft down.
Plumula, the ascending scaly part of the corculum.
Pollen, meal, the prolific powder contained in the anthera.
Pollex, a thumb, the length of the first joint of the thumb, or a parisian inch.
Polyadelphia, many brotherhoods, the eighteenth class in the sexual system.
Polyandria, many males, the thirteenth class in the sexual system of Linnæus.
Polycotyledones, many cotyledones.
Polygamia, many marriages, the twenty-third class in the sexual system.
Polygynia, many females, an order of some of the classes in the sexual system.
Polypetala corolla, a flower consisting of many petals.
Polyphyllum involucrum, an involucrum, of many leaves.
Polystachius culmus, a stalk of grass having many spikes.
Pomaceæ pomum, an apple, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Pomum, an apple.
Pori, pores.
Præmorfa radix, a bitten root, when it ends abruptly as in *Scabiosa*.
Preciæ, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Prisuraticus calyx, a triangular flower cup.
Procumbens caulis, lying on the ground.
Prolifer flos, flowers growing through, or out of one another, either from the center or side.
Prominulum dissepimentum, to jut out beyond the valves.
Pronum discum folii, leaves having their face downwards.
Propago, a shoot, the seed of mosses.
Proprium involucrum, an involucrum when at the base of an umbellated flower.
Pseudo, a bastard.
Pubes, down or hair, one of the seven kinds of fulcra.
Pulposum folium, a leaf having a pulpy or fleshy substance.
Pulveratum folium, a leaf powdered with a kind of dust like meal, as in *Primula farinosa*.
Punctatum folium, a leaf sprinkled with hollow dots or points.
Putamineæ, like a shell, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Q

- Quadrangulare folium*, a quadrangular leaf, having four prominent angles in the circumscription of its disk.
- Quadrifidum folium*, a leaf divided into four parts.
- Quadrjugum folium*, a leaf having four pair of folioles.
- Quadrilobum folium*, a leaf consisting of four lobes.
- Quadrupartitum folium*, a leaf consisting of four divisions down to the base.
- Quaterna folia*, when verticillate leaves come by fours, having four in each whorle.
- Quina folia*, verticillate leaves coming by fives.
- Quinatum folium*, when a digitate leaf has five folioles.
- Quinquangulare folium*, a leaf having five prominent angles in the circumscription of the disk.
- Quinquejugum folium*, when a pinnated leaf has five pair of folioles.
- Quinquelobum folium*, a leaf having five lobes.
- Quinquesidum folium*, a leaf consisting of five divisions, with linear sinuses, and straight margins.
- Quinquepartitum folium*, consisting of five divisions down to the base.

R

- Racemus*, a bunch of grapes or currants, or any other bunch of berries that bears that resemblance.
- Rachis*, the back bone, a species of receptaculum, as in the *Panicum*.
- Rachis, folii pinnati*, the middle rib of a winged leaf, to which the folioles are affixed.
- Radiatus flos*, a species of compound flowers, in which the florets of the disk are tubular, and those of the radius ligulate, as in the class *Syngenesia*.
- Radicalia folia*, leaves proceeding immediately from the root.
- Radicans caulis*, a stalk bending to the ground, and taking root where it touches the earth.
- Radicatum folium*, leaves shooting out roots.
- Radicula*, a little root.
- Radius*, a ray, the ligulate margin of the disk of a compound flower.
- Radix*, a root.
- Ramea folia*, regards leaves that grow only on the branches, and not on the trunk.

Ramo-

Ramosissimus caulis, stalks abounding with branches irregularly disposed.

Ramus, a branch of a tree.

Ramosus caulis, a stalk having many branches.

Receptaculum, a receptacle, the basis on which the parts of fructification are connected.

Reclinatum folium, a leaf reclined or bending downward.

Recurvatum folium, a leaf bent backwards.

Reflexus ramus, a branch bent back towards the trunk.

Regularis corolla, a flower whose parts are regular in its figure and magnitude.

Remotus verticillus, when the whorles of flowers or leaves stand at a distance from one another.

Reniforme folium, a kidney-shaped leaf.

Repandum folium, a leaf having a bending or waved margin, without any angles.

Repens radix, a creeping root extending horizontally.

Repens caulis, a creeping stalk, either running along the ground, on trees, or rocks, and striking roots at certain distances.

Reptans flagellum, creeping along the ground, as in *Fragaria*.

Restantes pedunculi, foot-stalks remaining on, after the fructification has fallen off.

Refupinatio florum, when the upper lip of the flower faces the ground, and the lower lip is turned upwards.

Refupinatum folium, when the lower disk of the leaf looks upwards.

Retroflexus ramus, a branch bent in different directions.

Retrofractus pedunculus, bent back towards its insertion, as if it were broken.

Retusum folium, when the apex of the leaf is blunt.

Revolutum folium, a leaf rolled back.

Rhæades, the red poppy, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Rhombeum folium, a leaf whose shape nearly resembles a rhombus.

Rhomboideum folium, a leaf of a geometrical figure, whose sides and angles are unequal.

Rigidus caulis, folia, stiff, hard, rigid.

Rimosus caulis, abounding with clefts and chinks.

Ringens, grinning or gaping.

Roseaceus flos, a flower whose petals are placed in a circle, in form like those of a rose.

Rostellum, a little beak, the descending plain part of the coraculum of the seed.

Rotaceæ, a wheel, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Rotatus limbus, corolla, a wheel-shaped flower, expanded horizontally, having a tubular basis.

Rotundatum folium, a roundish leaf.

Rubra lactescentia, red milkiness in plants.

Ruderata loca, rubbishy places.

Rugosum folium, a rough or wrinkled leaf.

S.

Sagittatum folium, an arrow-shaped leaf.

Sarmentaceæ, a twig or shoot of a vine, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Sarmentosus caulis, the shoot of a vine, naked between each joint, and producing leaves at the joints.

Scaber caulis, et folium, scabby and rough, having tubercles.

Scabridæ, rough, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Scabrities, a species of pubescens, composed of particles scarce visible to the naked eye, sprinkled on the surface of the plant.

Scandens caulis, a climbing stalk.

Scapus, a species of stalk which elevates the fructification, and not the leaves, as in *Narcissus*.

Scariosum folium, a kind of roughness on the surface of leaves.

Scitamina, fair, beautiful, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.

Scobiform, very small like sawdust, or filings.

Scorpioides flos, a flower resembling the tail of a scorpion.

Scutellum, a species of fructification which is orbicular, concave, and elevated in the margin, as in some species of *Lichen*.

Scyphifer, cup-bearing, a sub-division of the genus *Lichen*.

Secretoria scabrities, a species of glandular roughness on the surface of some plants.

Secunda spica, a spike of grass with the flowers turned all towards one side.

Securiformis pubescentia, a species of pubes on the surface of some plants, the bristles resembling an axe or hatchet.

Semen, seed.

Seminale folium, seed leaves.

Semiteres caulis, half a cylinder, flat on one side, and round on the other.

Sempervirens folium, an ever-green leaf.

- Seda folia*, leaves growing in fixes, as in *Galium spurium*.
Senticosæ, a briar or bramble, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Sepiariæ, a hedge, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Sericeum folium, a leaf whose surface is of a soft silky texture.
Serratum folium, a sawed leaf.
Sessile folium, a leaf growing immediately to the stem, without any footstalk.
Setæ, a bristle, a species of pubescens, covering the surface of some plants.
Setaceum folium, leaves shaped like bristles.
Sexus plantarum, plants are distinguished by the sex of their flowers, which are either male, female, or hermaphrodite.
Silicula, a little pod, a bivalve pericarpium, see the class *Tetradynamia*.
Siliqua, a pod, a pericarpium consisting of two valves, in which the seeds are fixed alternately to each suture.
Siliquosa, the second order in the class *Tetradynamia*.
Siliquosæ, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Simplex caulis, a simple or single stem.
Simplicissimus caulis, the most simple stalk.
Sinuatum folium, a leaf whose sides are hollowed or scolloped.
Situs foliorum, the disposition of leaves on the stem and branches, which are either starry, by three's, opposite, alternate, scattered, or crowded.
Solidus caulis, a solid stalk or stem.
Solitarius pedunculus, when only one flowerstalk proceeds from the same part.
Solutæ stipula, loose opposed to *adnatæ*.
Spadix, the receptaculum of a Palm, a pedunculus which proceeds from a *spatha*.
Sparsi rami, pedunculi, folia, scattered without order.
Spatha, a species of calyx resembling a sheath.
Spathaceæ, like a sheath, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Spatulatum folium, a leaf in form of a spatula, an instrument used to spread salve.
Species plantarum, the third subdivision in the Linnæan system.
Spica, a spike, a species of inflorescence resembling an ear of corn.
Spica secunda, when the flowers all turn towards one side.

- Spica disticha*, when the flowers are in two rows, and look two ways.
- Spicula*, a little spike.
- Spinæ*, thorns, or rigid prickles.
- Spinosus caulis*, strong prickles, whose roots proceed from the wood of the stem, and not from the surface of the bark.
- Spirales cotyledones*, seminal leaves twisted spirally.
- Spithama*, a span, or seven Parisian inches.
- Splendentia folia*, a shining leaf.
- Squarrosa radix*, a scaly root.
- Squarrosus*, rough, scaly, or scurfy.
- Stamen*, the filaments that sustain the anthera.
- Stamineus flos*, flowers having stamina, and no corolla.
- Statuminatæ*, a prop, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Stellata folia*, leaves surrounding the stem, like the rays of a circle.
- Stellata seta*, a species of pubescens called bristles, when they arise from the center in form of a star, as in the *Mesembryanthemum barbatum*.
- Stellata planta*, one of Mr Ray's classes, the *Tetrandria monogynia* of Linnæus.
- Stellatæ*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Sterilis flos*, a barren flower, *masculus* of Linnæus.
- Stigma*, apex of the pistillum.
- Stimulæ*, stings.
- Stipitatus pappus*, a kind of trunk that elevates the down and connects it with the seed.
- Stipula*, one of the kinds of fulcra of plants, generally growing on each side of the base of the footstalks of leaves or flowers, and are either by two's, single, deciduous, abiding, adhering, loose, on the inside of the footstalks, or on the outside.
- Stipulares glandulæ*, glands produced from stipulæ.
- Stolo*, a shoot, which running on the surface of the ground, strikes root at every joint, as in *Fragaria* and others.
- Striatus caulis, culmis, &c.* channelled streaks, running lengthways in parallel lines.
- Strictus caulis*, straight stiff shoots.
- Strigæ*, ridges, rows.
- Strobilus*, a species of pericarpium, formed from an amentum, as the cone of the pine-tree.
- Stylus*, that part of the pistillum which elevates the stigma from the germen.

- Submersum folium*, when aquatic plants have their leaves sunk under the surface of the water.
- Subramosus caulis*, a stalk having few branches.
- Subrotundum folium*, a leaf almost round.
- Subulatum folium*, an awl-shaped leaf.
- Succulentæ*, juicy, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Suffrutex*, an under shrub.
- Sulcatus caulis, culmus*, a stalk deeply furrowed lengthways.
- Superflua polygamia*, superfluous, the second order in the class *Syngenesia*.
- Superus flos*, when the receptacle of the flower stands above the germen.
- Supra-axillaris pedunculus*, the footstalk of a flower whose insertion is above the angle formed by the branch.
- Supra-decomposita folia*, are composite leaves, which have little leaves growing on a subdivided footstalk.
- Supra-foliaceus pedunculus*, the footstalk of a flower inserted into the stem immediately above the leaf.
- Surculus*, a twig, the stalks or branches of mosses.
- Syngenesia*, to generate together, the nineteenth class in the sexual system.

T

- Tegumentum*, a cover, the perianthium and corolla.
- Teres caulis, folium*, a cylindrical stalk or leaf.
- Tergeminum folium, compositum*, a leaf three times double, when a dichotomous petiolus is subdivided, having two foliola on the extremity of each division.
- Terminalis flos*, flowers terminating a branch.
- Terna folia*, leaves in whorles by threes.
- Ternatum folium*, leaves with three foliola on a petiolus.
- Tessellatum folium*, a chequered leaf, whose squares are of different colours.
- Tetradynamia*, the superiority or power of four, the fifteenth class in the sexual system.
- Tetragonus caulis*, a four-cornered or square stalk.
- Tetragynia*, four females, the fourth order of some of the classes in the sexual system.
- Tetrandria*, four males, the fourth class in the sexual system.
- Tetrapetala corolla*, a flower consisting of four petals.
- Tetraphyllus calyx*, a flower-cup consisting of four leaves.
- Tetrasperma planta*, producing four seeds.
- Thalamus*, a bed, the receptacle.
- Theca*, a sheath.
- Thursus*, a spike like a pine-cone.

Tomen-

- Tomentosus caulis, folia*, a stalk and leaf covered with a whitish down like wool.
- Tomentum*, a species of pubescence, covering the surface of some plants of woolly or downy substance.
- Torosum pericarpium*, brawny protuberances, like the swelling of the veins when a pericarpium is bunched out by the inclosed seeds.
- Torta corolla*, when the petals of a flower are twisted, as in *Nerium*.
- Tortilis arista*, awns or beards of corn twisted like a skrew.
- Transversum dissepimentum*, when the dissepiments are at right angles with the sides of the pericarpium.
- Trapeziforme folium*, a leaf having four prominent angles, whose sides are neither equal nor opposite.
- Triandria*, three males, the third class in the sexual system.
- Triangulare folium*, a triangular leaf.
- Tricocca capsula*, a capsule with three cells, and a single seed in each cell.
- Tricocceæ*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Tricuspidata*, three-pointed.
- Trifidum folium*, a leaf divided into three linear segments, having straight margins.
- Triflorus pedunculus*, a footstalk bearing three flowers.
- Trigonus caulis*, a three-sided stalk.
- Trigynia*, three females, third order in some of the classes.
- Trihillatæ*, a seed having three eyes.
- Trijugum folium*, a winged leaf, with three pair of foliola.
- Trilobum folium*, a leaf having three lobes.
- Trinervium folium*, a leaf having three strong nerves running from the base to the apex.
- Trioecia*, three houses, the third order in the class *Polygamia* in the sexual system.
- Tripartitum folium*, a leaf divided into three parts down to the base.
- Tripetala corolla*, a flower consisting of three petals.
- Tripetaloidæ*, three petaled, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Triphyllus calyx*, a cup consisting of three leaves.
- Tripinnatum folium, compositum*, a leaf having a triple series of pinnæ, or wings.
- Triplinerve folium*, a leaf having three nerves running from the base to the apex.
- Triquetrum folium, caulis*, leaves and stalks having three plain sides.

Trisperma,

- Trisperma**, three seeded, as in *Euphorbia*.
Triternatum folium, compositum, a compound leaf, when the divisions of a triple petiolus are subdivided into threes.
Trivalve pericarpium, a pod consisting of three valves.
Truncatum folium, a leaf having its apex as it were cut off.
Truncus, the body or stem of a tree.
Tuberculatus, having pimples or tubercles.
Tuberculum, a little pimple.
Tuberosa radix, a tuberous or knobbed root.
Tubulatum perianthium, tubular flowers, as in the class *Didynamia*.
Tubulosi flosculi, tubular florets nearly equal, one of the three divisions of compound flowers.
Tubus, a tube, the lower and narrow part of a monopetalous flower.
Tunicatus radix, a species of bulbous root, having coats lying over one another, from the center to the surface, as in the onion, tulip, &c.
Turbinatum pericarpium, a kind of pod shaped like a top, narrow at the base and broad at the apex.
Turgidum legumen, swollen, puffed out, as in *Ononis*.
Turio, the young buds or shoots of pines.

V

- Vaginales**, sheathed, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Vaginans folium, a leaf like a sheath, whose base infolds the stem.
Valvula, a valve, a partition of the external cover of that sort of pericarpium called capsula.
Vegetabilia, one of the three kingdoms of nature.
Venosum folium, the veins which run over the whole surface of a leaf.
Ventricosa spica, a spike narrowing at each extremity, and bellying out in the middle.
Ventriculosus calyx, a flower-cup bellying out in the middle, but not in so great a degree as *ventricosus*.
Vepreculæ, a briar or bramble, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
Verrucosa capsula, a capsule having little knobs, or warts on its surface.
Versatilis anthera, when the anthera is fixed by the middle on the point of the filament, and so poised as to turn like the needle of a compass.
Verticalia folia, leaves so situated that their base is perpendicular above the apex.

Ver-

- Verticillati rami, flores, folia*, branches, flowers, or leaves, surrounding the stem, like the rays of a wheel.
- Verticillatæ*, an order of plants in the *Fragmenta methodi naturalis* of Linnæus.
- Verticillus*, a species of inflorescence, in which the flowers grow in whorls, as in *Mentha*.
- Vesicula*, a little bladder.
- Vesicularis scabrities*, a kind of glandular roughness, resembling *Vesiculæ*.
- Vexillum*, a standard, the upright petal of a papilionaceous flower.
- Villosus caulis, folium*, a stalk, or leaf, covered with soft hairs.
- Virgatus caulis*, stalks shooting out ; slender, straight branches or rods.
- Viscidum folium*, a leaf whose surface is clammy.
- Viscositas*, glewy, clammy.
- Uliginosa loca*, boggy places.
- Umbella*, an umbel or umbrella.
- Umbellatus flos*, an umbellated flower, as in *Pentandria digynia*.
- Umbellula*, a little umbel.
- Umbilicatum folium*, a peltate leaf, shaped like a navel, at the insertion of the footstalk.
- Uncinatum stigma*, a hooked stigma.
- Undatum folium*, a waved leaf, whose surface rises and falls in waves towards the margin.
- Undulata corolla*, a flower whose petals are waved.
- Unguis*, a nail or claw, that part of a petal that is joined to the receptacle.
- Unicus flos*, one flower.
- Unicus radix*, a single root.
- Uniflorus pedunculus*, one flower on a footstalk.
- Unilateralis racemus*, a bunch of flowers growing on one side.
- Universalis umbella*, an universal umbel.
- Volva*, the membranaceous calyx of the fungi.
- Volubilis caulis*, a twining stalk.
- Urceolata corolla*, a pitcher-shaped flower.
- Urens caulis, folium*, a leaf or stalk, burning, stinging, as nettles.
- Utriculi*, a species of glandular, secretory vessels, on the surface of various plants.
- Vulgaris*, common, the trivial name of many plants in the books of old Botanists.



Plate 1.

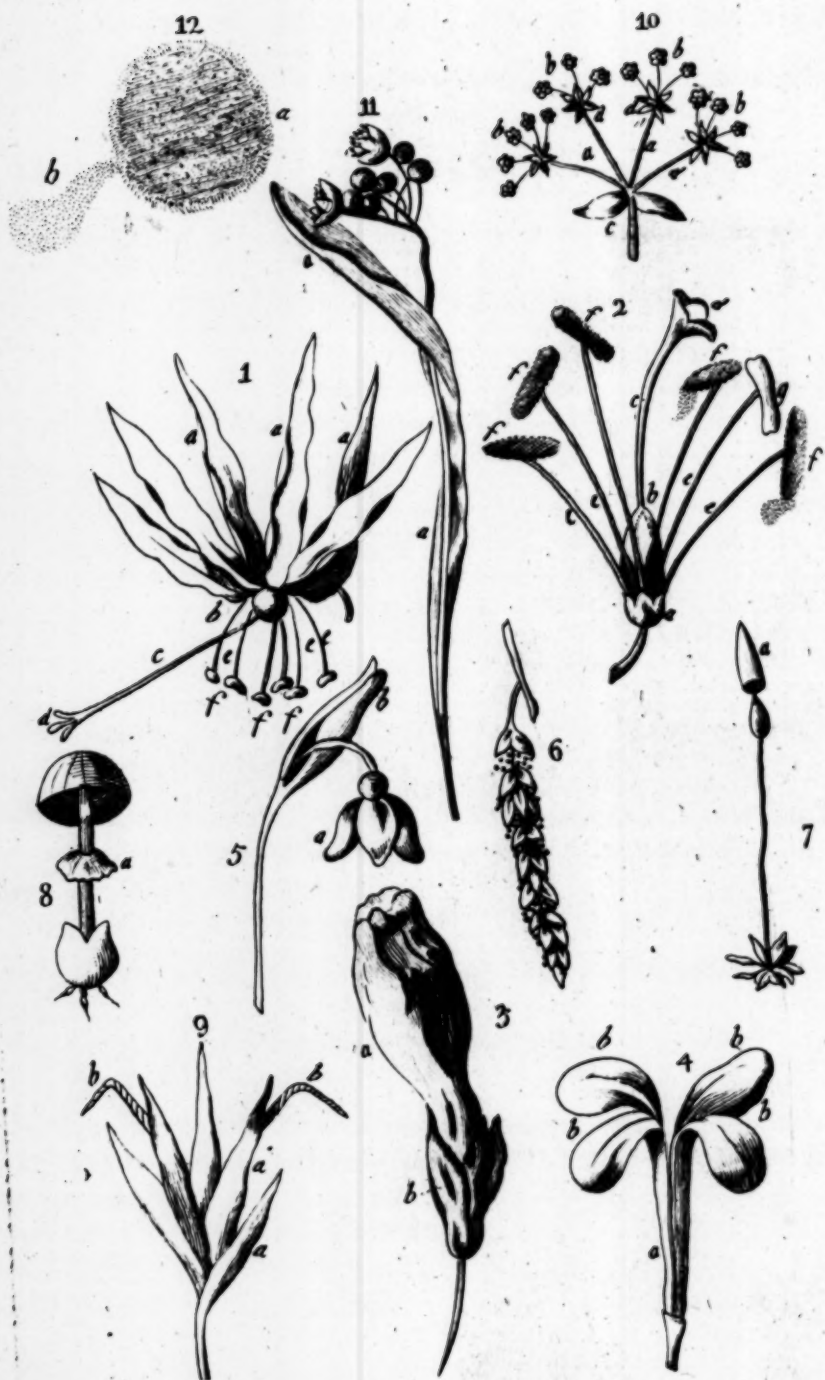


PLATE I.

PARTS OF THE FLOWER.

Fig. 1. **A** Flower with its Corolla, Pistillum, and Stamina (page 1) *a* the petals of the Corolla (p. 4) *b*, the Germen; *c*, the Style; *d*, the Stigma (p. 8) *e*, the Filaments; *f*, the Antheræ (p. 7)

Fig. 2. The Calyx, Pistillum and Stamina, separate from the Corolla (p. 1) *a*, the Perianthium (p. 2) *b*, the Germen; *c*, the Style; *d*, the Stigma (p. 8) *e*, the Filaments; *f*, the Antheræ bursting and discharging the Pollen; *g*, an Anthera before it has burst (p. 7)

Fig. 3. A Flower whose corolla is monopetalous: *a*, the Corolla (p. 5) *b*, the Perianthium (p. 2)

Fig. 4. A polypetalous Corolla: *a*, the Unguis; *b*, the Lamina (p. 5)

Fig. 5. A *Narcissus*, issuing from its Spatha: *a*, the Flower; *b*, the Spatha (p. 3)

Fig. 6. An Amentum (p. 3)

Fig. 7. The Fructification of a *Moss*, *a* the Calyptra (p. 3)

Fig. 8. A *Fungus*: *a*, the Volva (p. 3)

Fig. 9. A *Grass*: *a*, the Gluma; *b*, the Arista, (p. 3)

Fig. 10. A compound Umbel, *a*, the universal Umbel; *b*, the Umbellulæ, or partial Umbels (p. 12) *c*, the universal Involucrum; *d*, the partial Involucra (p. 3)

Fig. 11. A Bractea accompanying the flowers of the *Tilia*: *a*, the Bractea (p. 3)

Fig. 12. *a*, The Pollen seen with a microscope (p. 8) *b*, an elastic Vapour discharged from it (p. 9)

PLATE II.

PARTS OF THE FRUIT.

- Fig. 1. **A** Capsule: *a*, the Valvules (p. 9)
- Fig. 2. *a*, A Receptacle of seeds (p. 12)
- Fig. 3. A Strobilus (p. 10)
- Fig. 4. A winged Seed: *a*, the Seed; *b*, the Wing (p. 11.)
- Fig. 5. A Legumen: *a*, the upper Suture, along which runs the Receptacle of the seeds (p. 10)
- Fig. 6. A Siliqua: *a*, *b*, the two Sutures to which the seeds are fastened alternately (p. 10)
- Fig. 7. A Seed crowned with a pappus: *a*, the Seed; *b*, the Stipes of the Pappus (p. 11) *c*, a hairy Pappus; *d*, a feathery Pappus (p. 11, 29)
- Fig. 8. The Seed of a *Bean* split in two: *a*, the Cotyledons; *b*, the Corculum; *c*, the Rostellum; *d*, the Plumula; *e*, the Hilum (p. 11)
- Fig. 9. A Drupa: *a*, the Nucleus, or Stone, *b*, the Pulp (p. 10)
- Fig. 10. A Pomum: *a*, the Capsule; *b*, the Pulp (p. 10)
- Fig. 11. A Berry: *a*, the Seeds; *b*, the Pulp (p. 10)
- Fig. 12. A Seed crowned with a Calyculus: *a*, the Seed; *b*, the Calyculus (p. 11, 29)

Plate 2.

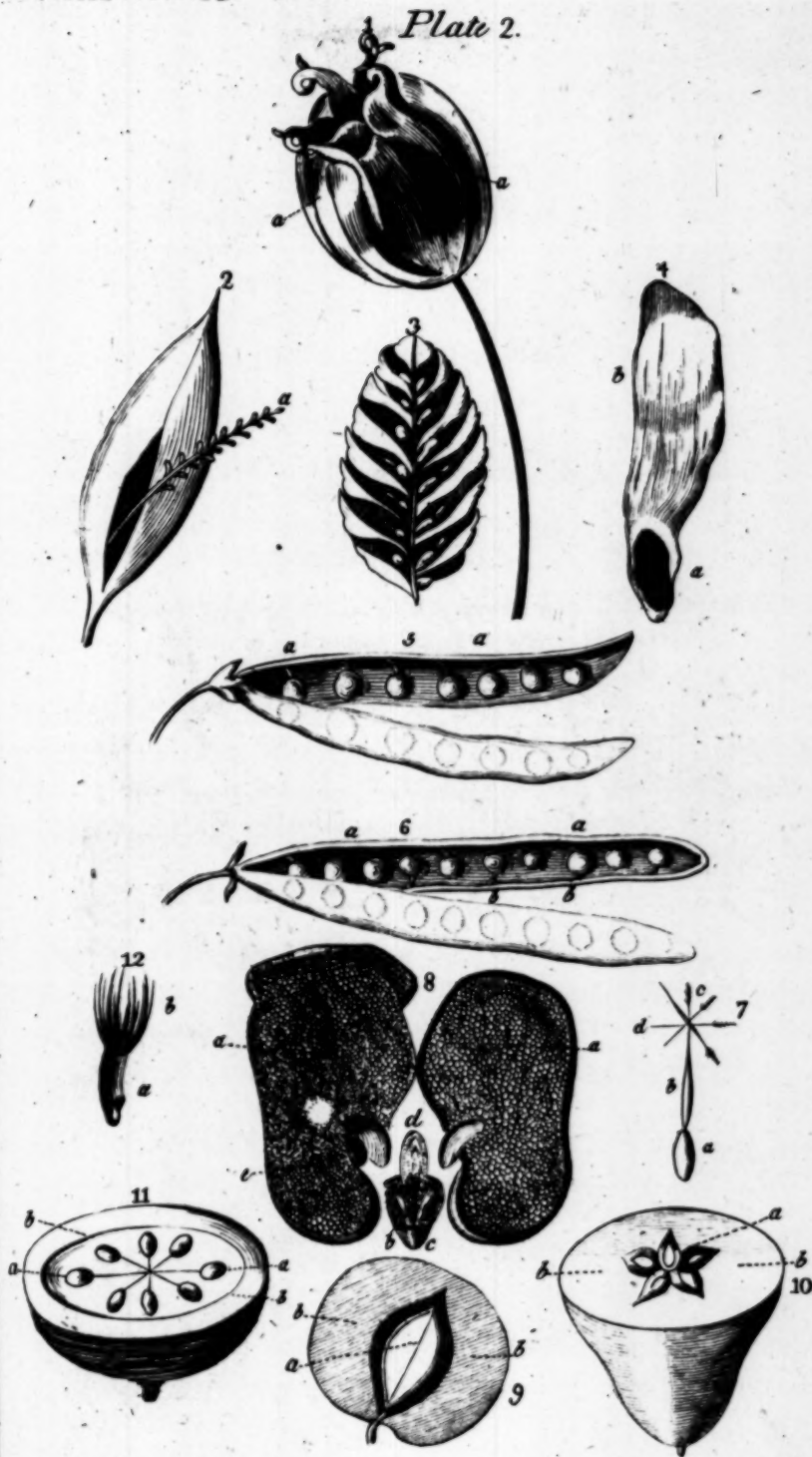






Plate 3.

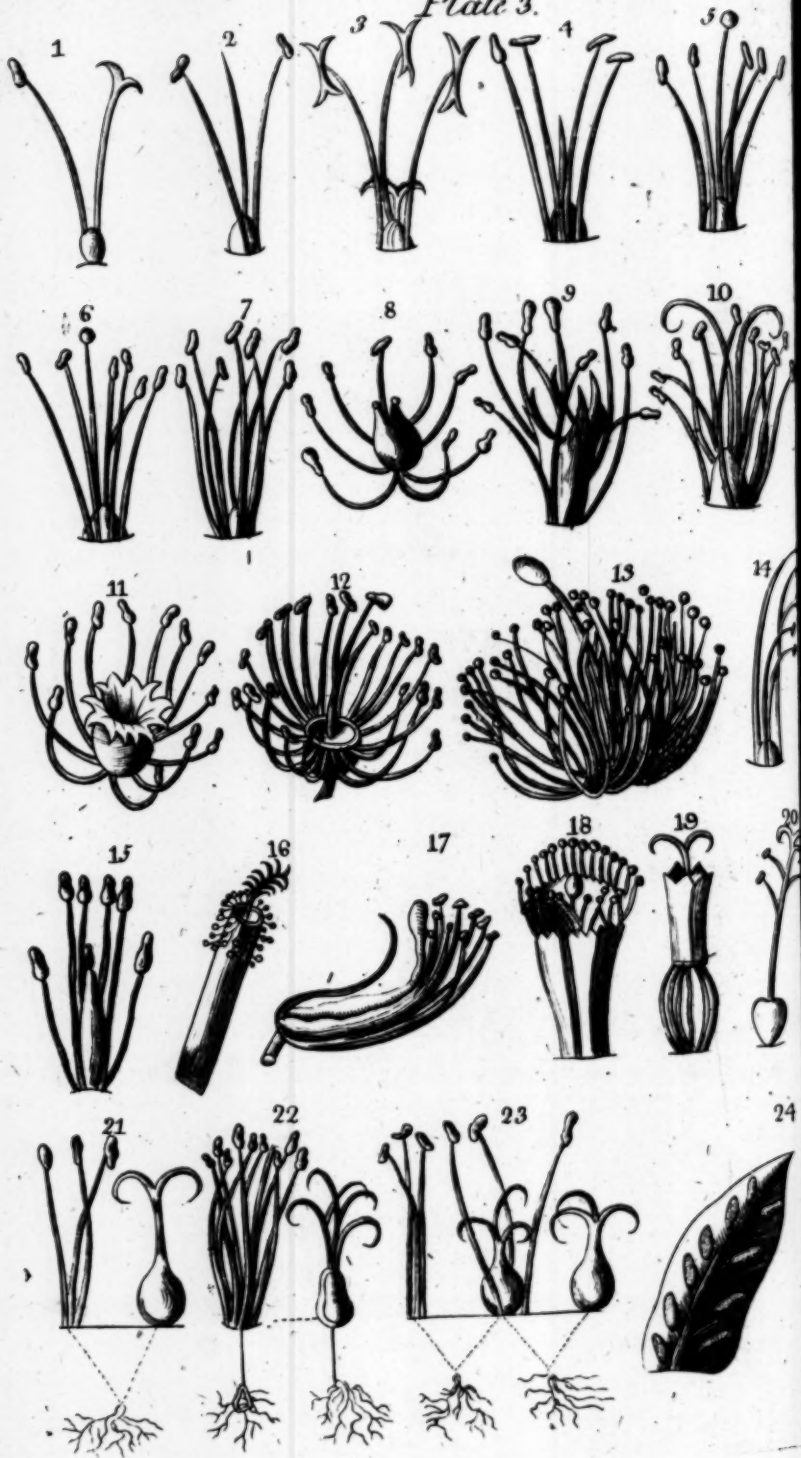


PLATE III.

CLASSES.

FIG. CLASS.

- 1 Monandria (p. 51, 58)
- 2 Diandria (p. 51, 59)
- 3 Triandria (p. 51, 60)
- 4 Tetrandria (p. 51, 61)
- 5 Pentandria (p. 51, 63)
- 6 Hexandria (p. 51, 66)
- 7 Heptandria (p. 51, 68)
- 8 Octandria (p. 51, 68)
- 9 Enneandria (p. 51, 69)
- 10 Decandria (p. 51, 70)
- 11 Dodecandria (p. 52, 71)
- 12 Icosandria (p. 52, 72)
- 13 Polyandria (p. 52, 73)
- 14 Dielynia (p. 52, 75)
- 15 Tetradynamia (p. 52, 78)
- 16 Monadelphia (p. 53, 80)
- 17 Diadelphia (p. 53, 81)
- 18 Polyadelphia (p. 53, 87)
- 19 Syngenesia (p. 53, 83)
- 20 Gynandria (p. 54, 92)
- 21 Monoecia (p. 54, 94)
- 22 Dioecia (p. 54, 96)
- 23 Polygamia (p. 54, 98)
- 24 Cryptogamia (p. 55, 100)

PLATE IV.

- 1 **A** Scaly Bulb, as in the white lily (p. 145).
- 2 A solid Bulb, as in the tulip (p. 145).
- 3 A double Bulb, as in the chequered daffodil.
- 4 A globular or round Root, as in the earth nut.
- 5 Transverse section of a coated bulb (p. 145).
- 6 A tuberous handed root, as in the orchis (p. 145).
- 7 A bundled root (p. 145).
- 8 A granulous root, as in white saxifrage.
- 9 A tuberous and pendulous root, as in dropwort (p. 145).
- 10 A simple tapering root, as in the carrot (p. 121).
- 11 A jointed root as in wood sorrel.
- 12 A branched root (p. 121).
- 13 A creeping root (p. 121).

Plate . 4







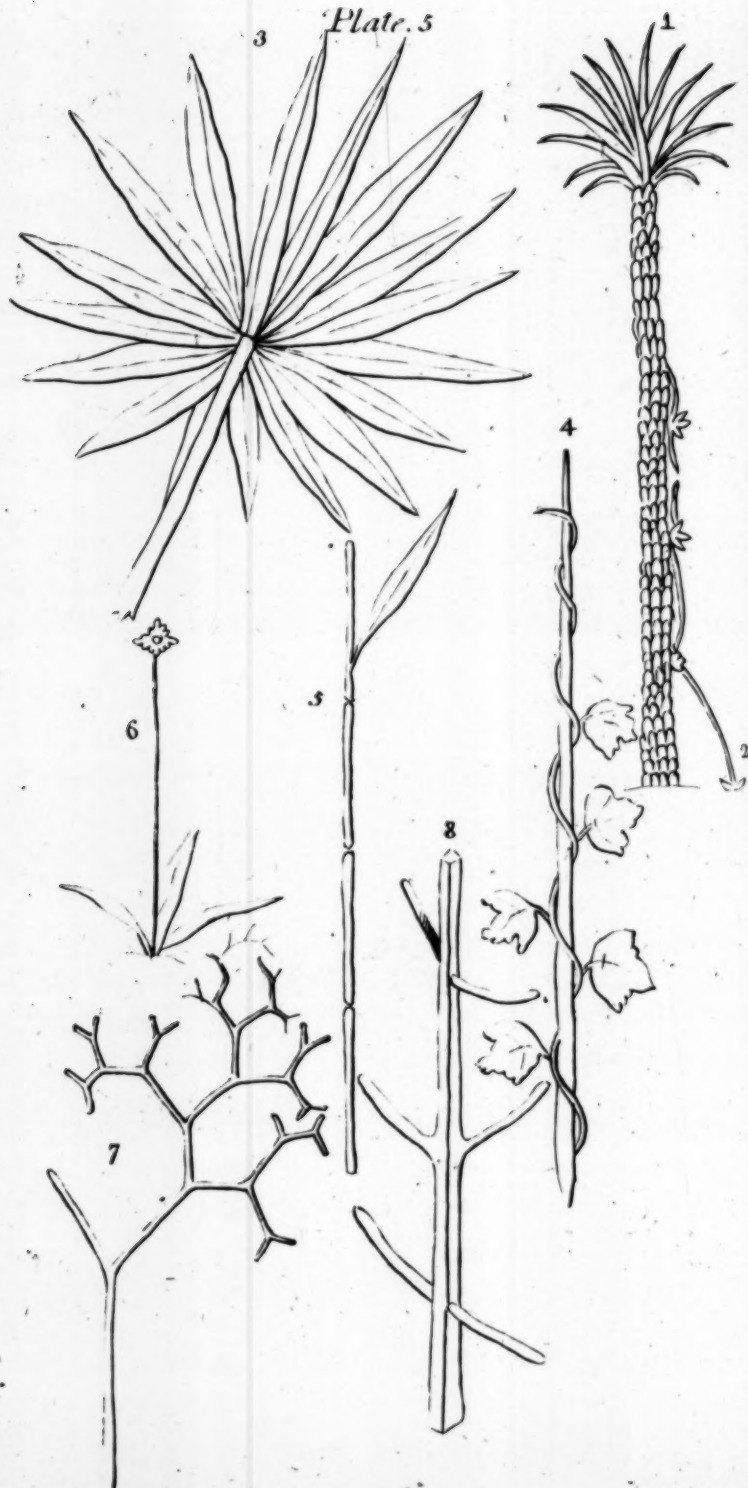


PLATE V.

TRUNK.

- Fig. 1. **A** Squamose Culm (p. 125)
Fig. 2. A Repent Stem (p. 123)
Fig. 3. A Frons (p. 128) see also the note
at p. 43.
Fig. 4. A Voluble stem (p. 123)
Fig. 5. An Articulate Culm (p. 125)
Fig. 6. A Scapus (p. 125)
Fig. 7. A Dichotomous Stem (p. 125)
Fig. 8. A Brachiate Stem (p. 125)

PLATE VI. LEAVES.

SIMPLE LEAVES.

FIG.

- 1 Orbiculate (p. 128)
- 2 Subrotund (128)
- 3 Ovate (p. 128)
- 4 Oval (p. 129)
- 5 Oblong (p. 129)
- 6 Lanceolate (p. 129)
- 7 Linear (p. 129)
- 8 Subulate (p. 129)
- 9 Reniform (p. 130)
- 10 Coriaceous (p. 130)
- 11 Lunulate (p. 130)
- 12 Triangular (p. 129)
- 13 Sagittate (p. 130)
- 14 Cordato-sagittate *
- 15 Hastate (p. 130)
- 16 Fissa (p. 130)
- 17 Trilobe (p. 131)
- 18 Præmorse (p. 131)
- 19 Lobate (p. 130)
- 20 Quinquangular (p. 129)
- 21 Erofe (p. 133)
- 22 Palmate (p. 131)
- 23 Pinnatifid (p. 131)
- 24 Laciniate (p. 131)
- 25 Sinate (p. 131)
- 26 Dentato-sinate †
- 27 Retrorsum-sinate ‡
- 28 Partite (p. 131)
- 29 Repand (p. 132)
- 30 Dentate (p. 132)

* Partaking of both Heart and Arrow-shape.

† Partaking of the indented and the hollowed.

‡ Hollowed backwards.

The explanation of these terms was omitted in the
Chapter of Simple Leaves.

Plate 6.

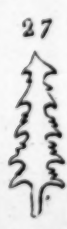
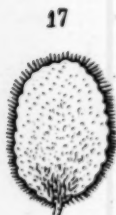






Plate 7₃



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PLATE VII. LEAVES:

SIMPLE LEAVES *continued.*

Fig.

- 1 **S**errate (p. 132)
- 2 Duplicato-serrate (p. 132)
- 3 Duplicato-crenate (p. 132)
- 4 Cartilagineous (p. 133)
- 5 Acutely-crenate (p. 132)
- 6 Obtusely-crenate (p. 132)
- 7 Plicate (p. 134)
- 8 Crenate (p. 132)
- 9 Crisp (p. 134)
- 10 Obtuse (p. 132)
- 11 Acute (p. 132)
- 12 Acuminate (p. 132)
- 13 Obtuse with an Acumen *
- 14 Acutely-emarginate †
- 15 Cuneiform-emarginate ‡
- 16 Retuse (p. 131)
- 17 Pilose (p. 133)
- 18 Tomentose (p. 133)
- 19 Hispid (p. 133)
- 20 Ciliate (p. 133)
- 21 Rugose (p. 134)
- 22 Venose (p. 134)
- 23 Nervose (p. 134)
- 24 Pappilose (p. 133)
- 25 Linguiiform (p. 135)
- 26 Acinaciform (p. 135)
- 27 Dolabriform (p. 135)
- 28 Deltoid (p. 130)
- 29 Triquetrous (p. 136)
- 30 Canaliculate (p. 135)

* Blunt with a point.

† Sharply nicked.

‡ Wedge-shaped and nicked. The Explanation of these terms was omitted in the chapter of simple leaves.

PLATE VIII. LEAVES.

SIMPLE LEAVES *continued*.

FIG.

- 1 **S** Ulcate (p. 136)
- 2 **S** Teretes (p. 135)

COMPOUND LEAVES.

- 3 Binate
- 4 Ternate, with the folioles sessile (p. 136)
- 5 Ternate, with the folioles petiolate (Digitate)
- 6 Digitate
- 7 Pedate (p. 137)
- 8 Pinnate with an odd one (p. 136)
- 9 ——— abrupt (p. 137)
- 10 ——— alternately (p. 137)
- 11 ——— interruptedly (p. 137)
- 12 ——— cirrhone (p. 137)
- 13 ——— conjugate (p. 137)
- 14 ——— decursively (p. 137)
- 15 ——— articulately (p. 137)
- 16 Lyrate* (p. 131)
- 17 Biternate (p. 137)
- 18 Bipinnate (p. 137)
- 19 Triternate (p. 137)

* This belongs to the simple leaves.

Plate 8.

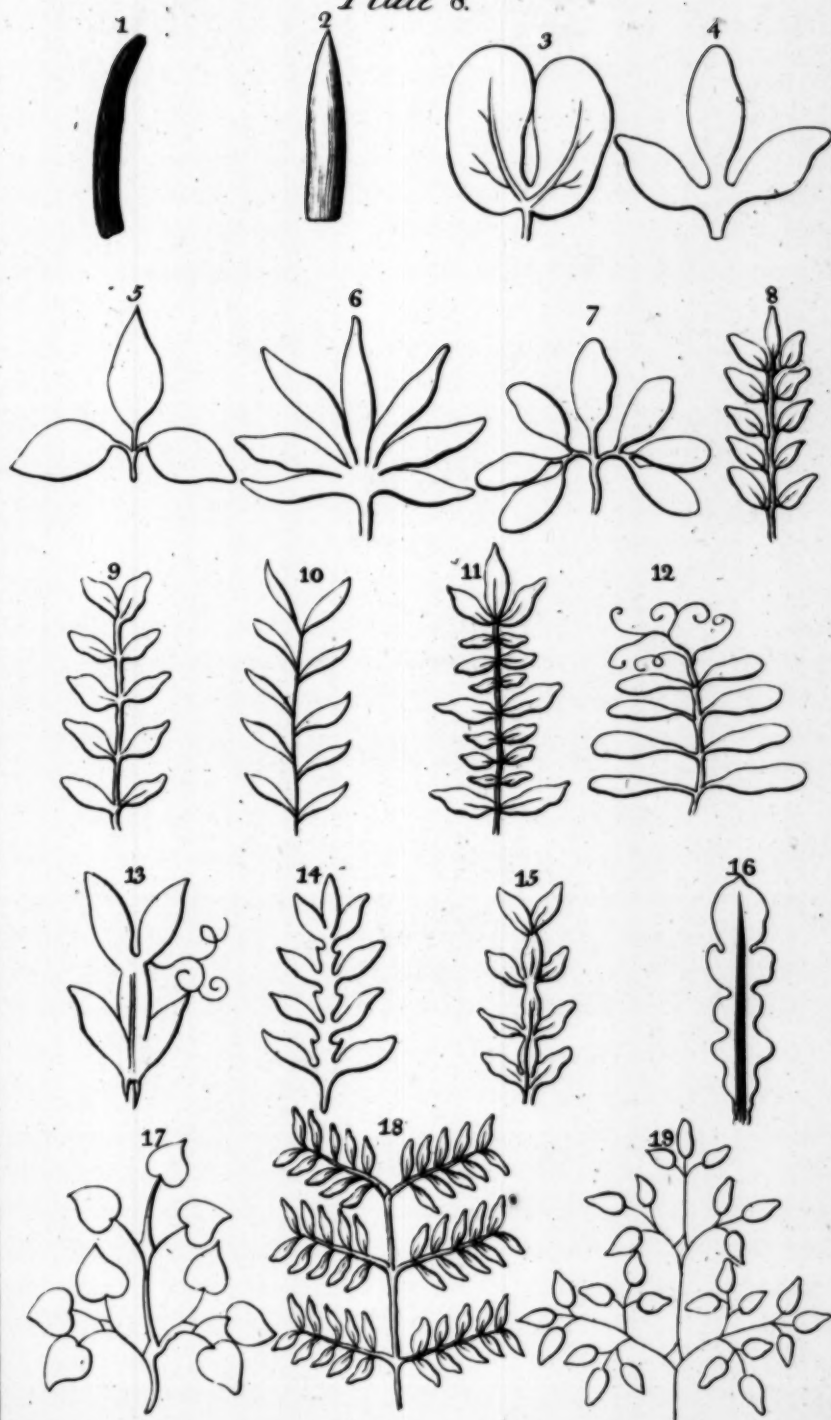






Plate 9.

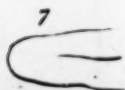
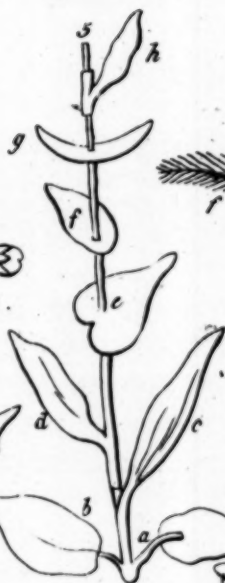


PLATE IX. LEAVES.

COMPOUND LEAVES *continued.*

- Fig. 1. **T** Ripinnate abrupt (p. 137)
 Fig. 2. **T** ——— with an odd one (p. 137)

DETERMINATE LEAVES.

- Fig. 3. *a*, Inflex (p. 140)
b, Erect (p. 140)
c, Patent (p. 140)
d, Horizontal (p. 140)
e, Reclined (p. 140)
f, Revolute (p. 140)
 Fig. 4. *a*, Seminal (p. 138)
b, Cauline (p. 138)
c, Rameous (p. 138)
d, Floral* (p. 138)
 Fig. 5. *a*, Peltate (p. 139)
b, Petiolate (p. 139)
c, Sessile (p. 139)
d, Decurrent (p. 139)
e, Amplexicaul (p. 139)
f, Perfoliate (p. 139)
g, Connate (p. 139)
h, Vaginant (p. 139)
 Fig. 6. *a*, Articulate † (p. 136)
b, Stellate (p. 138)
c, Quatern (p. 138)
d, Opposite ‡ (p. 138)
e, Alternate (p. 138)
f, Acrosc § (p. 129)
g, Imbricate (p. 139)
h, Fasciculate (p. 139)
 Fig. 7. Parabolic || (p. 129)
 Fig. 8. Spatulate (p. 129)

* This must be distinguished from the Bractea, or floral leaf in Plate I. Fig. II.

† This is a compound Leaf.

‡ The definition in the page cited, confines this Term to leaves in pairs that cross each other; but by this figure, taken from Linnæus, it appears to be applicable also to leaves in pairs that are not so circumstanced.

§ The definition of this has been given amongst the simple Leaves, though it stands more properly here.

|| This and Fig. 8. are simple leaves omitted in their place,

PLATE X.

FULCRA,

Fig. 1. *a*, **A** Cirrhus (p. 141)

b, Stipulæ (p. 141, 149)

c, Concave Glandules (p. 141, 156)

Fig. 2. *a*, Pedicellate* Glandules (p. 141, 156)

Fig. 3. *a*, Bractææ differing from the leaves (p. 141)

b, The Leaves.

g 4. *a*, Simple Spines (p. 141, 155)

b, A Triple Spine.

Fig. 5. *a*, Simple Aculei (p. 141, 155)

b, Triple Aculei, or Forks (p. 155)

Fig. 6. *a*, Opposite leaves (p. 138)

b, The Axillæ (p. 126, 158)

9 SE 65

* Such as are born on Pedicells, or little Footstalks.

† See the Note on Plate IX. Fig. 6. *d*.

Plate 10.

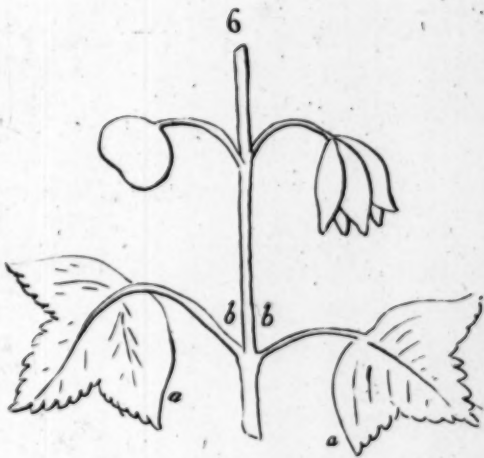
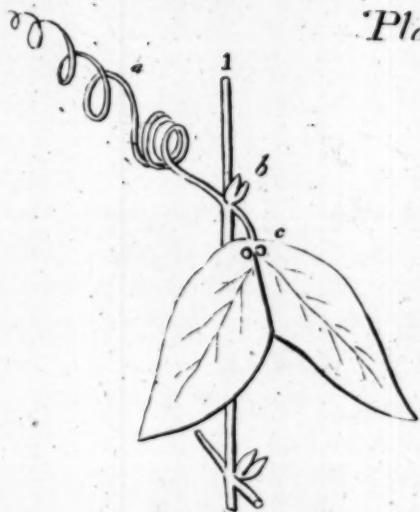






Plate II.

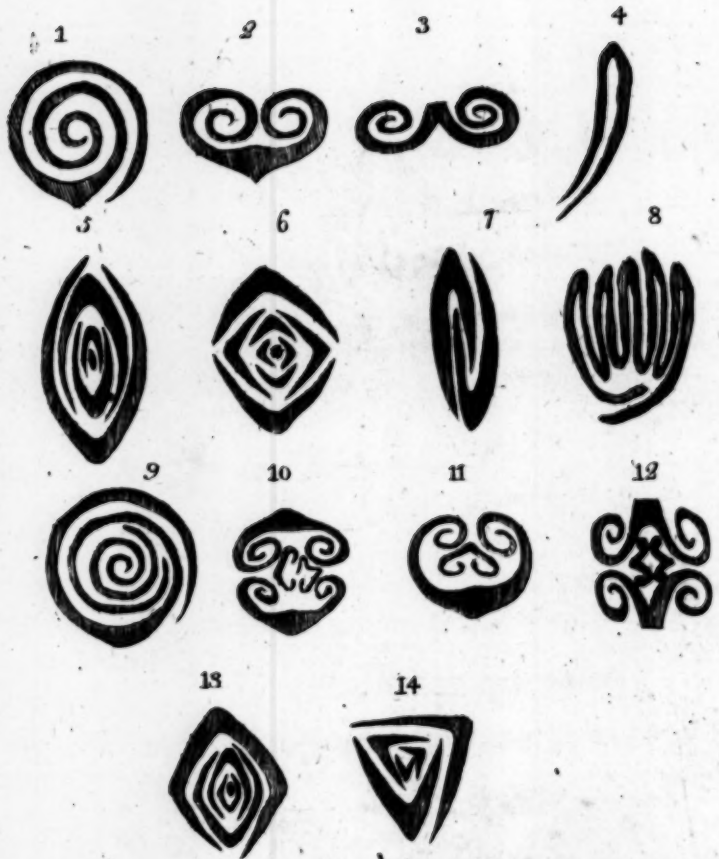


PLATE XI.

FOLIATION.

FIG.

- 1 **C** Onvolute (p. 150)
- 2 Involute (p. 150)
- 3 Revolute (p. 150)
- 4 Conduplicate (p. 151)
- 5 Equitant (p. 151)
- 6 Imbricate (p. 151)
- 7 Obvolute (p. 150)
- 8 Plicate (p. 151)
- 9 Convolute* (p. 150)
- 10 Involute opposite } (p. 150 involute.)
- 11 ——— alternate }
- 12 Revolute opposite (p. 150)
- 13 Equitant ancipit† } (p. 151 equitant.)
- 14 ——— triquetrous }

* More than one leaf convolute. Fig. 1. is a single Convolution.

† Equitant with two prominent angles. See the difference in Fig. 3. which has not those angles.

‡ Equitant three ways, so as to form a triangle.

P L A T E X I I .

M I S C E L L A N E O U S .

- Fig. 1. **A** Corymbus (p. 127)
- Fig. 2. An Arillus exemplified in the Fruit of the Euonymus : *a*, the Valvules of the capsule ; *b*, a Seed ; *c*, the Arillus opened to discover the Seed (p. 11, 33)
- Fig. 3. A Verticillus (p. 127)
- Fig. 4. *a*, the horned Nectaria in *Aconitum* ; *b*, two Peduncles or Styles that support them (p. 6)
- Fig. 5. A paleaceous Receptacle of a compound flower shewn in *Rudbeckia* : *a*, the Paleæ that part the Florets of the Disk ; *b*, the tubulose Florets of the Disk ; *c*, the ligulate Corollulæ of the Radius ; *d*, a ligulate Corollula fallen off (p. 34, 35, 89)
- Fig. 6. A Spatha ; *b*, a Spadix (p. 3, 12)
- Fig. 7. A Racemus, (p. 127)
- Fig. 8. A tubulose Floret of a Compound Flower, (p. 34, 89)
- Fig. 9. A monopetalous Hypocrateriform Corolla : *a*, the Tube ; *b*, the Limb (p. 5)
- Fig. 10. A Nectarium that crowns the corolla shewn in the Cup of a *Narcissus* ; *a*, the Cup or Nectarium (p. 21)
- Fig. 11. A Spike (p. 126)
- Fig. 12. A calycine Nectarium shewn in the Flower of a *Tropæolum* ; *a*, the Nectarium (p. 21)
- Fig. 13. A Nectarium of singular Construction shewn in a Flower of the *Parnassia* : *a*, five heart-shaped Nectaria terminated by styles or threads, each of which is crowned with a little ball (p. 21)
- Fig. 14. A Cyma of the *Laurustinus* (p. 12)
- Fig. 15. A Panicle (p. 127)





EXPLANATION

BOTANIC TERMS,

ACCORDING TO THE SEXUAL SYSTEM OF LINNÆUS.

Of various kinds of ROOTS, the TRUNK, BRANCHES, LEAVES,
and FRUCTIFICATION, in their Natural Order.

RADIX THE ROOT*.

An Organ by which a Plant receives its nourishment.

DURATION.

- 1 **A** NNUA, annual, that dies in one Year.
- 2 Biennis, biennial, that dies in the space of two Years.
- 3 Perennis, perennial, that regerminates several Years successively.

FIGURE.

- 4 Fibrosa, fibrous, consisting entirely of Filaments.
- 5 Ramosa, ramous, subdivided into branchy Fibres.
- 6 Fusiformis, spindle-shaped, simple, and gradually lessening downward.
- 7 Præmorsa, bitten, or gnawed.
- 8 Repens, creeping horizontally, and putting forth Radicles downward, and shooting upwards.
- 9 Articulata, jointed, divided into joints.
- 10 Dentata, toothed, having rows of Knobs like Teeth.
- 11 Globosa, round, (158) Roots springing from the sides of others.

* Vide page 121.

- 12 Tuberosa, tuberous, consisting of fleshy bodies connected by slender Fibres.
- 13 Fascicularis, bunched, fleshy Roots sessile, connected at the Base (150)
- 14 Palmata, handed, fleshy lobate Roots, like fingers (184)
- 15 Bulbosa, furnished with a bulb (655)
- 16 Granulata, granulated, round fleshy Roots like Seeds.

TRUNCUS the TRUNK or STEM.

The Organ which supports the Branches, Leaves, and Fructification.

KINDS.

- 17 Caulis, a Stem, which elevates the Fructification and leaves.
- 18 Culmus a straw, properly the trunk of Grasses.
- 19 Scapus, a stalk, elevating the Fructification and not the Leaves.
- 20 Stipes, A trunk that expands itself into a Leaf.

DURATION.

- 21 Herbaceous, herb-like, that perishes every year, an annual Stem, not woody.
- 22 Suffruticosus, suffruticous, half shrubby, the Root permanent, and the Branches sometimes withering.
- 23 Fruticosus, shrubby, with perennial Stalks arising from the Root, that are woody.
- 24 Arboreous, tree-like, with a single woody stem, from the same Root.
- 25 Solidus, solid, without internal Pores.
- 26 Inanis, pithy, filled with a spongy Substance.
- 27 Fistulosus, fistulous, hollow like a Pipe.

DIRECTION.

- 28 Erectus, erect, rising nearly to a perpendicular direction.
- 29 Strictus, straight, perpendicular without Flexure.
- 30 Rigidus, hard, not easily bent.
- 31 Laxus, loose, easily bent.
- 32 Obliquus, awry, in a direction neither perpendicular nor horizontal.
- 33 Adscendens, rising upwards, with a Curve like an Arch.
- 34 Declinatus, declined, bending downwards archways.
- 35 Incurvatus, incurvate, bending inwards.
- 36 Nutans, nodding, the Top or Head bent downwards.
- 37 Diffusus, diffuse, with spreading Branches.
- 38 Procumbens, procumbent, lying on the ground.
- 39 Stoloniferus, producing shoots or runners from the Root.

- 40 Sarmentofus, thread-like, producing Roots from the joints.
- 41 Repens, creeping, trailing on the ground, and here and there producing Roots.
- 42 Radicans, rooting, striking Root laterally and fixing to other Bodies.
- 43 Geniculatus, jointed, divided by knots, or round swellings.
- 44 Flexuosus, waved, bent backwards and forwards from bud to bud.
- 45 Scandens, climbing, generally by the support of some other body.
- 46 Volubilis, twining, growing round some other body in a spiral ascending direction.
- Dextrorsum, twining from the right to the left.
- Sinistorsum, twining from the left to the right.

FIGURE.

- 47 Teres, round, cylinder-shaped without angles.
- 48 Semiteres, half-round, semicylindrical.
- 49 Compresus, flattened, with two opposite sides flat.
- 50 Anceps, two-edged, flattened with two opposite sides sharp.
- 51 Angulatus, angulated, having three or more angles formed by as many intermediate longitudinal cavities.
- Acutangulus, sharp-angled.
- Obtusangulus, obtusely-angled.
- 52 Triqueter, three-sided, having three sides that are quite flat.
- 53 Trigonus, Tetragonus, &c. three-cornered, four-cornered, &c. having three, four, or more prominent angles lengthways.
- 54 Nudus, naked, without leaves or other covering.
- 55 Aphyllus, without leaves.
- 56 Foliatus, leafy, furnished with leaves.
- 57 Vaginatus, sheathed, surrounded with a sheath, formed by the base of the leaf.
- 58 Squamosus, squamous, covered with scales.
- 59 Imbricatus, imbricate, covered with leaves like scales placed like tiles, or the scales of fishes.

SURFACE.

- 60 Suberosus, suberous, the outward Bark, soft, but elastic like Cork.
- 61 Rimosus, rimous, the outward bark full of cracks and fissures.
- 62 Tunicatus, tunicated, coated with skins or membranes.
- 63 Lævis, smooth, free from Protuberances or Inequalities.
- 64 Striatus, striate, marked with small lines.
- 65 Sulcatus, sulcate, furrowed with deep hollow lines.
- 66 Glaber, slippery, smooth and glossy like glass.

67 Scaber,

- 67 Scaber, scabrous, covered with rough Prominences.
- 68 Muricatus, muricated, covered with sharp points or prickles.
- 69 Tomentosus, tomentose, covered with down.
- 70 Lanatus, woolly.
- 71 Villosus, villous, covered with soft hair.
- 72 Pilosus, pilose, covered with long hairs that are thinly placed.
- 73 Hispidus, hispid, covered with stiff hairs or bristles.
- 74 Aculeatus, aculeate, armed with prickles, 378.
- 75 Spinosus, spinous, armed with thorns, 384.
- 76 Urens, stinging, armed with stings, 391.
- 77 Stipulatus, stipulate, having stipule, 291.
- 78 Membranatus, membranated, flat like a thin pellucid leaf.
- 79 Bulbiferus, bearing bulbs, 653.

COMPOSITION.

- 80 Enodis, without knots or joints, thickness uniform.
- 81 Simplicissimus, very simple, with few or no branches.
- 82 Simplex, simple, that rises uniform and regular to the top.
- 83 Integer, intire, undivided.
- 84 Articulatus, jointed.
- 85 Prolifer, proliferous, sending forth branches only from the apex.
- 86 Dichotomous, branched always by two, forked.
- 87 Brachiatus, brachiate, branching opposite, the upper pair crossing the next below.
- 88 Subramosus, subramous, having few lateral branches.
- 89 Ramosus, ramous, having many lateral branches.
- 90 Ramosissimus, many branches subdivided without order, in all directions.
- 91 Virgatus, virgated, with many slender twigs.
- 92 Paniculatus, paniculated, whose branches are variously subdivided.
- 93 Fastigiatus, fastigate, branches arising from a center to an equal height.
- 94 Patens, spreading, 134.
- 95 Divaricatus, divaricate, branches forming an obtuse angle from the trunk, 105.

RAMI PARTES CAULIS,

The Branches Part of the Stem.

- 96 Alterni, alternate, when they come out single and follow in gradual order, 113.
- 97 Distichi, distichous, in two rows.
- 98 Sparsi, sparfed, scattered without order, 118.
- 99 Conferti,

- 99 Conferti, crowded, 119.
- 100 Oppositi, opposite, 126.
- 101 Verticillati, verticillate, Branches surrounding the Stem, or at the joints like the Rays of a Wheel.
- 102 Erecti, erect, upright, perpendicular.
- 103 Coarcti, close together, almost touching towards the top.
- 104 Divergentes, divergent, branches growing from the trunk at Right Angles like Rays from a Center.
- 105 Divaricati, divaricate, branches shooting from the trunk so as to make an obtuse angle.
- 106 Deflexi, deflex, bending downwards arch-wise.
- 107 Reflexi, reflex, bending back towards the Trunk.
- 108 Retroflexi, retroflex, bending backward and forward towards the Trunk.
- 109 Fulcrati, fulcrate, having props or supports.

The LEAVES.

The Organs by which Plants are put in Motion.

THEIR PLACE.

- 110 Radicale, radical, springing from the Root.
- 111 Caulinum, cauline, springing from the Stem.
- 112 Rameum, rameous, growing on the branches.
- 113 Axillare, axillary, placed at the insertion of the branch.
- 114 Florale, floral, placed near the Flower, and are commonly smaller.

SITUATION.

- 115 Alterna, alternate, when they come out single, and follow in gradual order.
- 116 Disticha, distichous, disposed in two opposite rows, though inserted on all sides.
- 117 Bifaria, bifarious, inserted only on two opposite sides of a Branch or middle Rib.
- 118 Sparsa, sparsed, scattered in no certain Order.
- 119 Conferta, confert, crowded together.
- 120 Imbricata, imbricate, lying over one another like Scales of Fishes.
- 121 Fasciculata, fasciculate, growing in Bunches from one Point.
- 122 Gemina, Trina, &c. two, three, or more together from the same Point.
- 123 Confluentia, confluent, growing together or running into one another at the base.
- 124 Approximata, approximate, mutually approaching each other.

- 125 Remota, remote, placed at some distance from each other.
- 126 Opposita, opposite, growing opposite, but in such a manner, that each Pair crosses the other above and below.
- 127 Decussata, decussated, where the Pairs cross each other in a regular manner.
- 128 Verticillata, verticillate, whorled, where three or more Leaves surround the Stem.
- 129 Terna, Quaterna, &c. three or four together, &c. according to the Number of Leaves surrounding each Joint.

DIRECTION.

- 130 Erectum, erect, upright, perpendicular.
- 131 Strictum, straight, quite perpendicular without flexure or bending.
- 132 Rigidum, rigid, stiff, not easily bent.
- 133 Adpressum, adpressed, the Disk of the Leaf pressed towards the Stem.
- 134 Patens, patent, spreading, making an acute angle with the Stem.
- 135 Horizontale, horizontal, growing from the Stem at Right Angles.
- 136 Assurgens, assurgent, bending upwards, 33.
- 137 Inflexum, inflex, bending inwards towards the Stem.
- 138 Reclinatum, reclinate, bending downwards archways, the Apex ascending.
- 139 Recurvatum, recurvate, bent backwards in the form of an arch, the convex side upwards.
- 140 Revolutum, revolute, rolled back in form of a scroll.
- 141 Dependens, dependent, hanging with the point downwards.
- 142 Obliquum, oblique, the Base looking upwards, the Apex to the Horizon.
- 143 Verticale, vertical, leaves so situated that the Base is perpendicular to the Apex.
- 144 Resupinatum, resupinate, when the lower Disk of the Leaf looks upwards.
- 145 Submersum, submersed, sunk under the surface of the Water.
- 146 Natans, natant, floating on the surface of the Water.
- 147 Radicans, radicant, striking root.

INSERTION.

- 148 Petiolatum, petiolate, having a Petiole or footstalk, 290.
- 149 Peltatum, peltate, having the footstalk inserted into the Disk of the Leaf.

- 150 Sessile, sessile, sitting immediately on the Stem without a footstalk.
- 151 Adnatum, adnate, the upper Disk of the Leaf adhering to the Stem by an attachment of its Base.
- 152 Coadunata, coadunate, several growing together at their Base.
- 153 Decurrens, decurrent, where the Base of a sessile Leaf is elongated and runs down the stem.
- 154 Amplexicaule, amplexicaul, embracing the Stem with its Base.
- 155 Perfoliatum, perfoliate, where the Base of the Leaf entirely surrounds the Stem, or when the stalk grows through the Centre of the Leaf.
- 156 Connata, connate, where two opposite Leaves grow together at their Bases.
- 157 Vaginans, vaginant, where the Base of the Leaf forms a tubular sheath that surrounds the Stem.

FIGURE.

- 158 Subrotundum, subrotund, almost round, nearly circular.
- 159 Orbiculatum, orbiculate, of a circular figure.
- 160 Ovatum, ovate, egg shaped.
- 161 Ovale, oval, the shape of an egg when both ends are equal.
- 162 Oblongum, oblong, twice the length of its breadth.
- 163 Parabolicum, parabolic, like the smaller end of an egg.
- 164 Cuneiforme, cuneiform, wedge-shaped, tapering from the Apex to the Base.
- 165 Spatulatum, spatulate, rounded at the Apex, and narrower and linear at the Base.
- 166 Rotundatum, rotundate, rounded, or with angles in a Circle.
- 167 Lanceolatum, lanceolate, oblong, and tapering towards both extremities.
- 168 Ellipticum, elliptical, an oval, whose ends are equal.
- 169 Lineare, linear, every where of the same breadth.
- 170 Acerosum, acrose, linear, and permanent, like chaff, or the leaves of Pines.

ANGLES.

- 171 Integrum, entire, undivided, without divisions.
- 172 Triangulare, triangular, &c. three-angled, &c.
- 173 Deltoideum, deltoid, a leaf whose angles are formed like the Greek Delta.
- 174 Rhombeum, rombus-shaped, an irregular four-sided figure, resembling the Ace of Diamonds.

SINUSES.

- 175 Trapeziforme, trapeziform, a figure of four unequal sides.

- 176 Cordatum, cordate, heart-shaped.
- 177 Reniforme, reniform, kidney-shaped.
- 178 Lunatum, lunate, shaped like a half Moon.
- 179 Sagittatum, sagittate, arrow-shaped.
- 180 Hastatum, hastate, spear-shaped.
- 181 Runcinatum, runcinate, like the teeth of a great Saw whose Serratures are bent downwards.
- 182 Panduriforme, panduriform, fiddle-shaped.
- 183 Fissum, slit, divided into linear partitions.
- 184 Lobatum, lobate, divided into Lobes.
- 185 Bilobum, Trilobum, &c. two and three-lobed, &c. according to the number of the Lobes.
- 186 Partitum, partite, divided almost to the Base; the number of divisions is expressed by the terms *Bipartite*, *Tripartite*, &c.
- 187 Palmatum, palmate, divided like a hand.
- 188 Lyratum, lyrate, lyre-shaped, with transverse divisions broadest at the Apex, the lower ones gradually less and more distant.
- 189 Pinnatifidum, pinnatifid, deeply divided into transverse, lateral, oblong Segments.
- 190 Sinuatum, sinuate, divided into lateral hollows.
- 191 Laciniatum, lacinate, divided into Segments.
- 192 Squarrosus, squarrose, divided into elevated Segments, not plane or parallel, as in the Calyx of some Syngnefious Plants.

MARGIN.

- 193 Integerrimum, very entire, without any incision.
- 194 Crenatum, crenate, where the Margin is notched at right angles to the centre, without inclining to either extremity.
- 195 Serratum, serrate, sawed, notches like the teeth of a Saw, inclining all the same way, either towards the point, or Base.
- 196 Ciliatum, ciliate, where Bristles are arranged in a parallel order on the Margin of the Leaf, like Eye-lashes.
- 197 Dentatum, dentate, toothed, points like Teeth protruding from the Margin of the leaf, at some distance from each other.
- 198 Spinosum, spinose, where the Margin is armed with sharp Spines.
- 199 Cartilagineum, cartilaginous, where the Margin is hard and tough.
- 200 Repandum, repand, where the Margin is waved.

201 Lacerum

- 201 Lacerum, lacerate, where the Margin is variously divided as if torn.
 202 Erosum, erose, where the margin is sinuate, as if gnawed with teeth.
 203 Membranaceum, membranaceous, where the Margin is thin and pellucid.
 204 Dædaleum, dedalous, where the Margin has many various windings and turnings.

APEX.

- 205 Obtusum, obtuse, where the point is rounded.
 206 Emarginatum, emarginate, where the Apex is notched.
 207 Retusum, retuse, terminating in an obtuse hollow.
 208 Præmorsum, premorse, where the termination appears as if bitten off.
 209 Truncatum, truncate, terminating in a line as if cut off.
 210 Acutum, acute, terminating in a sharp angle.
 211 Acuminatum, acuminate, terminating in a sharp point.
 212 Cuspidatum, cuspidate, terminating in a point like a spear.
 213 Mucronatum, mucronate, terminating in a small prickle.
 214 Cirrhosum, cirrhose, terminating in a clasper or Tendril,
 292.

SURFACE.

- 215 Nudum, naked, without hairs or excrescences.
 216 Glabrum, smooth, slippery.
 217 Nitidum, glossy, smooth, and shining.
 218 Lucidum, lucid, bright, reflecting light.
 219 Coloratum, coloured, of a Colour different from Green.
 220 Nervosum, nervous, with nerves extended from the Base to the Apex.
 221 Trinerve, where three nerves join at the Base and Apex.
 222 Triplinerve, where three nerves are each divided into three more above the Base.
 223 Trinervatum, where three nerves run into each other at the Base.
 224 Enerve, without nerves, opposite to nervous.
 225 Lineatum, lined, with depressed nerves or hollow Lines.
 226 Sulcatum, furrowed with deep Lines.
 227 Venosum, veined, with veins many ways.
 228 Rugosum, rugose, wrinkled, shrivelled, rough.
 229 Bullatum, studded, bladdery, alternately convex and concave.
 230 Lacunosum, where the Disk of the leaf is depressed into deep cavities between the veins that run parallel from the Disk to the Margin.
 231 Avene, without Veins.

232 Punctatum

- 232 Punctatum, punctate, with hollow scattered Punctures.
- 233 Papillosum, papillose, covered with fleshy Punctures.
- 234 Papulosum, papulose, covered with vascular Punctures.
- 235 Viscidum, viscid, covered with a viscid Humour.
- 236 Villosum, villous, covered with soft Hairs.
- 237 Tomentosum, downy, covered with downy Hairs.
- 238 Sericeum, silky, covered with soft silky Hairs.
- 239 Lanatum, woolly, covered with woolly Hairs.
- 240 Barbatum, bearded, Hairs growing in Tufts.
- 241 Pilosum, pilous, covered with long Hairs that appear distinctly.
- 242 Scabrum, rough, covered with rigid Punctures raised above the Surface.
- 243 Hispidum, hispid, covered with hard Bristles.
- 244 Aculeatum, prickly, covered with sharp Prickles (378).
- 245 Strigosum, strigous, armed with lance-shaped Prickles (167).

EXPANSION.

- 246 Planum, plane, with a flat and equal surface.
- 247 Canaliculatum, channelled, a deep Channel or Furrow, running lengthways.
- 248 Concavum, concave, when the Disk is arched from the Margin, and forms a Hollow.
- 249 Convexum, convex, opposite to concave: these two Terms arise from the same Cause, the Margin being too tight for the Expansion of the Disk; therefore if a Leaf is concave on one Side, it is convex on the other.
- 250 Cucullatum, hollowed, when the sides of a Leaf press together at the Base, and expand towards the Apex.
- 251 Plicatum, plaited, folded in sharp Flexures from the Disk to the Margin.
- 252 Undatum, waved, the Flexures or Folds, being obtuse from the Disk to the Margin.
- 253 Crispum, curled, where the Margin is plaited, but the Folds do not reach to the middle Rib of the Disk.

SUBSTANCE.

- 254 Membranaceum, skinny, pellucid, without any fleshy Substance.
- 255 Scariosum, of a dry parched substance, that sounds when touched.
- 256 Gibbum, gouty, when both Sides of a Leaf are bunched out by a copious quantity of Pulp.
- 257 Teres, cylindrical, or pillar-shaped.

258 Depres-

- 258 Depressum, more pulpy in the Disk, and flatted towards the Sides.
- 259 Compressum, more flatted in the Disk, and pulpy towards the Sides.
- 260 Carinatum, carinate, the lower part of the Disk prominent lengthways.
- 261 Compactum, compact, of a solid substance.
- 262 Tubulosum, tubulous, the Inside hollow without Pith.
- 263 Pulposum, pulpy, of a fleshy pulpy substance.
- 264 Carnosum, fleshy, the Inside of a solid Pulp.
- 265 Triquetrum, triquetrous, three-cornered lengthways.
- 266 Anceps, two-angled or edged lengthways.
- 267 Lingulatum, tongue-shaped, linear, fleshy, the lower side convex.
- 268 Ensisforme, sword-shaped, double-edged, gradually lessening from the Base to the Point.
- 269 Subulatum, subulate, linear at the Base, and smaller towards the Point.
- 270 Acinaciforme, scymitar-shaped, fleshy, and compressed, one Side convex sharp, the other straight and thicker.
- 271 Dolabriforme, hatchet-shaped, compressed and half round, gibbous outward, the Edge sharp, the lower part rounded.

DURATION.

- 272 Deciduum, deciduous, finished, and falling off in one Summer.
- 273 Caducum, cadent, falling off, of short duration, not abiding through the Summer.
- 274 Perfitens, persisting, abiding, lasting or remaining more than one summer.
- 275 Perenne, perennial, continuing green many Years.
- 276 Sempervirens, evergreen, green at all times of the Year.

COMPOSITION.

- 277 Articulatum, articulate, a leaf having a little Leaf growing out of its Point.
- 278 Conjugatum, conjugate, winged, the little Leaves or Wings coming by pairs.
- 279 Digitatum, digitate, a single Foot-stalk connecting the little Leaves at its top.
- 280 Binatum, Ternatum, Quinatum, &c. terminating by two, three, or five little Leaves or Folioles.
- 281 Pedatum, pedate, like the Toes of the Feet, the Foot-stalk, dividing Sideways obliquely, and connecting many Folioles,

282 Pinnatum

- 282 Pinnatum, pinnate, winged, a simple Foot-stalk connecting many little Leaves sidewise.
- 283 Bijugum, thus Trijugum, Quadrijuga, Quinquejuga, Sejuga, &c. winged, but the little Leaves coming by Pairs, and are four, six, eight, ten, twelve, &c.
Cum impari, winged, not terminating in Pairs, but with an odd Foliolate.
- Abrupte pinnatum, abruptly winged, terminating without a tendril, or an odd Foliolate.
- Cirrhosum, cirrhous, terminating in a Tendril or Clasper, (292).
- Foliolis oppositis, (126) the little Leaves growing opposite.
- Foliolis alternis, (115) the little Leaves growing alternate.
——ruptis, the little Leaves, alternately smaller, broken.
——Decursivis, the Foot stalks of the little Leaves running down the middle Rib, or Rachis (153).

DECOMPOSITION.

- 284 Bigeminum, the Foot-stalk, forked by two's (86), connecting many little Leaves.
- 285 Bitermum, doubled by threes (280).
- 286 Bipinnatum, double winged (282).

TRIPLE COMPOSITION.

- 287 Tergeminum, triple-budded.
- 288 Triternum, three times three.
- 289 Tripinnatum, three ways winged.

FULCRA, PROPS.

Supports for the better sustaining the different parts of Plants

- 290 Petiolus, a Foot-stalk that sustains the Leaf.
- 291 Stipula, a Scale at the Base of the Foot-stalk which it supports.
- 292 Cirrhus, clasps, or Tendrils, growing like Threads, in a spiral Form, which take hold on Plants, or any other Body near them.
- 293 Pubes, a downy Hair in all Plants.
- 294 Arma, armed with Points, to keep off Animals from hurting them.
- 295 Bractea, floral Leaves, the Face and Texture different from other Leaves.
- 296 Pedunculus, the Foot-stalk or Prop that sustains the Fructification.

PETI-

PETIOLUS, FOOT-STALK of the LEAF.

FIGURE.

- 297 Linearis, (169) linear, every where the same Breadth.
 298 Alatus, winged, spread out at the Sides.
 299 Clavatus, clubbed, thickened towards the Point.
 300 Membranaceous, flat, thin, and generally pellucid.
 301 Teres, (257) rounded like a Cylinder, pillar-shaped.
 302 Semiteres, (48) half-rounded, like a split Column.
 303 Triqueter (52) three-sided.

MAGNITUDE.

- 304 Brevissimus, very short, when the length of the Foot-stalk is not equal to the length of the Leaf.
 305 Brevis, short, not quite so long as the Leaf,
 306 Mediocris, of the length of the Leaf.
 307 Longus, longer than the Leaf.
 308 Longissimus, something longer than the Leaf.

INSERTION.

- 309 Insertus, inserted, joined.
 310 Adnatus, (151) adhering to.
 311 Decurrens, (153) running down the Branch.
 312 Amplexicaulis, (154) embracing the Stalk with its Base.
 313 Appendiculatus, a leafy Appendage, adhering to the Base of a Leaf.

DIRECTION.

- 314 Erectus (130) upright.
 315 Patens (134) spreading.
 316 Assurgens (136) bending upwards in a kind of Arch.
 317 Recurvatus (139) bent backwards.

SURFACE.

- 318 Glaber (216) smooth.
 319 Aculeatus (244) prickly.
 320 Nudus (215) naked.
 321 Articulatus (84) jointed.
 322 Spinefcens, hard and sharp.

STIPULÆ, APPENDAGES to the LEAF.

- 323 Geminæ, two and two by pairs.
 324 Solitariae, single, scattered.
 325 Laterales, inserted in the sides.
 326 Extrafoliaceæ, on the outside, below the Base of the Petiole.
 327 Intrafoliaceæ, on the inside, above the Base of the Petiole.

Z z

328 Opposi-

- 328 Oppositifoliaceæ, opposite, placed on the Sides at the Base of the Leaf.
- 329 Caducæ, (273) falling off, withering before the Leaf.
- 330 Deciduaæ, (272) falling annually.
- 331 Persistentes, abiding after the Leaf falls off.
- 332 Spinescentes, (322) hard and sharp, like a Spine or Prickle.
- 333 Sessiles, (150) squat, having no Footstalk.
- 334 Adnatæ, (151) adhering to the Branch by an attachment of its upper Surface.
- 335 Decurrentes, (153) running down the Branch.
- 336 Vaginantæ, (157) furrounding the Stem like a sheath.
- 337 Subulatæ, (269) awl shaped.
- 338 Lanceolatæ, (167) lance-shaped.
- 339 Sagittatæ, (179) arrow-shaped.
- 340 Lunatæ, (178) moon-shaped.
- 341 Erectæ, (130) upright.
- 342 Patentæ, (134) spreading.
- 343 Integerrimæ, (193) entire.
- 344 Serratæ, (195) sawed.
- 345 Ciliatæ, (196) lashed like the eye.
- 346 Dentatæ, (197) toothed.
- 347 Fissæ, (183) split.

CIRRHUS, a TENDRIL or CLASPER.

- 348 Axillaris, (113) at the insertion of the Branch.
- 349 Foliaris, sitting on a Leaf.
- 350 Petiolaris, growing on the foot-stalk of the Leaf, (290).
- 351 Peduncularis, (296) growing on the foot-stalk of the Flower.
- 352 Simplex, undivided.
- 353 Trifidus, divided in three parts.
- 354 Multifidus, divided in many parts.
- 355 Convolutus, twisting, in the same Direction as the Sun, in Rings.
- 356 Revolutus, revolute, rolled back in half spiral Rings.

PUBES, DOWN or PUBESCENCE.

- 357 Pili, excretory Ducts, long distinct Hairs.
- 358 Lana, wool, curled hairs and thick.
- 359 Barba, bearded tufts of parallel hairs.
- 360 Tomentum, down, hairs scarcely conspicuous.
- 361 Strigæ, strong, hard, flat hairs.

- 362 *Setæ*, Bristles, rigid, round Hairs.
- 363 *Simplices*, single, not divided.
- 364 *Hamosæ*, hooked, by which they easily adhere to Animals.
- 365 *Ramosæ*, *f. Furcatæ*, subdivided into little Branches, or forked.
- 366 *Plumosæ*, feathery, composed of fine Down, or Hairs.
- 367 *Stellatæ*, starry, disposed cross-wise.
- 368 *Hami*, Hooks, Prickles with recurved Points.
- 369 *Glochides*, Prickles with the Points turned back, having many teeth.
- 370 *Glandulæ*, Glands, little Teats for throwing out the excrementitious Humour of Plants; these are either *Sessiles*, squat; *Stipitata*, having a Foot-stalk; or, *Porosa*, having a Pore, often Perforating a Leaf.
- 371 *Utriculi*, little Vessels replete with secretory Liquor.
- 372 *Foliacei*, inserted in the Leaves.
- 373 *Petiolares*, (350) inserted in the Foot-stalk of the Leaf.
- 374 *Pedunculares*, (351) inserted in the Foot-stalk of the Flower.
- 375 *Stipulares*, (291) inserted in the *Stipulæ*.
- 376 *Viscositas*, a Humour of a clammy Quality.
- 377 *Glutinositas*, a Humour whose Quality is of a lubricating slippery nature.

ARMA, ARMS.

- 378 *Aculei*, sharp Prickles fixed in the bark of Plants.
- 379 *Recti*, straight without bending.
- 380 *Incurvi*, bent inwards.
- 381 *Recurvi*, bent outwards.
- 382 *Furcæ*, Prickles divided into many Forks.
- 383 *Bifidæ*, and *Trifidæ*, by two, and three, or according to the number of Divisions.
- 384 *Spina*, a Spine, a Prickle fixed in the Wood of the Trunk, or Branch.
- 385 *Terminalis* terminating the Branch.
- 386 *Axillaris*, (113) growing from the Insertion of the Branch.
- 387 *Calycina*, growing on the Cup.
- 388 *Foliaris*, (349) growing on the Leaf.
- 389 *Simplex*, (363) single.
- 390 *Divisa*, divided at the Point.
- 391 *Stimuli*, Stings, that make inflammatory Punctures, which go off with an Itching.

BRACTEÆ, FLORAL LEAVES.

- 392 *Coloratæ*, (219) coloured.
 393 *Caducæ*, (273) falling off with the Flower.
 394 *Deciduae*, (272) falling off.
 395 *Persistentes*, (274) abiding.
 396 *Coma*, a *Bractea*, terminating the stalk above the Flower, distinguished by its Magnitude or Colour.

PEDUNCULUS, FOOT-STALK of a FLOWER.

- 397 *Partialis*, in some Flowers growing from the common Footstalk.
 398 *Communis* a Foot-stalk common to many Flowers.
 399 *Pedicellus*, a little Foot-stalk proper to Flowers that have a common Foot-stalk, (398).
 400 *Scapus*, a Peduncle rising from the Root, resembling a Stalk.

PLACE.

- 401 *Radicalis*, (110) springing from the Root.
 402 *Caulinus*, (111) springing from the Stem.
 403 *Rameus*, (112) growing from the Branch.
 404 *Petiolaris*, (350) growing from the Petiole.
 405 *Cirrhiterus*, (292) growing from the Tendril or Clasper.
 406 *Terminalis*, (385) terminating the Branch.
 407 *Axillaris*, (113) at the insertion of the Branch or Leaf.
 408 *Oppositifolius*, (328) having opposite Leaves.
 409 *Lateriflorus*, (325) flowering at the sides.
 410 *Intrafoliaceus*, (327) within the Leaves.
 411 *Extrafoliaceus*, (326) on the outside of the Leaves.

SITUATION.

- 412 *Alterni*, (115) alternate.
 413 *Sparsi*, (118) scattered.
 414 *Oppositi*, (126) opposite.
 415 *Verticillati*, (128) in Circles round the Stem.

NUMBER.

- 416 *Solitarius*, (324) single.
 417 *Geminatus*, (323) by twos.
 418 *Umbellula sessilis*, many Peduncles from the same Centre, produced of the same height.

DIRECTION.

- 419 *Adpressus*, (133) pressed towards the Stem.
 420 *Erectus*, (139) upright.
 421 *Patens*, (134) spreading.
 422 *Cernuus*, the Point looking downwards.

423 *Resupin-*

- 423 *Resupinatus*, (144) looking upwards.
 424 *Declinatus*, (34) bent downwards archways.
 425 *Nutans*, (36) nodding, hanging downward.
 426 *Flaccidus*, slender, weak, when the weight of a proper Flower makes it hang downwards.
 427 *Ascendens*, (33) rising upwards archwise.
 428 *Pendulus*, hanging loose.
 429 *Strictus*, (29) straight.
 430 *Flexuosus*, bending from one Flower to another.
 431 *Retrofractus*, bent backward and forward, as if broken.
 432 *Uniflorus*, *Biflorus*, *Triflorus*, &c. *Multiflorus*, one Flower, two Flowers, three Flowers, &c. many Flowers according to the number of Flowers growing on the Foot-stalk.

STRUCTURE.

- 433 *Teres*, (47) round like a Cylinder.
 434 *Triquetus*, (52) three-sided.
 435 *Tetragonus*, (53) four-angled.
 436 *Filiformis*, thread-shaped, every where of equal Thickness.
 437 *Attenuatus*, lessening gradually in Thickness towards the Point.
 438 *Clavatus*, clubbed, thick towards the Point, (299).
 439 *Incrassatus*, gradually thickening upwards.
 440 *Nudus*, (215) naked.
 441 *Squamosus*, (58) scaly.
 442 *Foliatus*, (56) leafy.
 443 *Bracteatus*, (295) furnished with floral Leaves.
 444 *Geniculatus*, (43) jointed.
 445 *Articulatus*, (84) knotted.

INFLORESCENTIA, INFLORESCENCE.

Is the Manner by which Flowers are joined to the Plant by the Peduncle or Foot-stalk.

- 446 *Verticillus*, whorled, many Flowers growing round the Stalk in a Circle.
 447 *Sessilis*, squat, without any manifest Foot-stalk.
 448 *Pedunculatus*, a Peduncle elevating the Flowers.
 449 *Nudus*, (450) (451) opposite to the following.
 450 *Involucratus*, (520) furnished with an involucre.
 451 *Bracteatus*, (443) having floral Leaves.
 452 *Confertus*, Foot-stalks crowded together.
 453 *Distans*, the Foot-stalks distant.
 454 *Capitulum*, a Head, Flowers collected into a Globe or Head.

455 *Subro-*

- 455 Subrotundum, (456) nearly of a globular Figure, almost round.
- 456 Globosum, globular, perfectly round.
- 457 Dimidiatum, halved, like a Globe cut into two Parts.
- 458 Foliosum, leafy, Leaves intermixed with the Flowers.
- 459 Nudum, naked, without Leaves or Bristles.
- 460 Fasciculatus, bunched, a Flower growing in bunches.
- 461 Spica, sessile Flowers growing alternate on a common Peduncle.
- 462 Simplex, a single Spike, undivided.
- 463 Composita, many little Spikes growing from the common Peduncle.
- 464 Glomerata, many little Spikes crowded together.
- 465 Ovata, (160) Egg-shaped.
- 466 Ventricosa, (256) swollen, gouty.
- 467 Cylindrica, pillar-shaped.
- 468 Interrupta, Spikes alternately smaller.
- 469 Imbricata, (120) scaled.
- 470 Articulata, (84) knotted, jointed.
- 471 Ramosa, branching variously.
- 472 Linearis, (169) linear, of equal width, length-wise.
- 473 Ciliata, (196) lashed.
- 474 Foliacea, leafy.
- 475 Comosa, terminating in little Leaves.
- 476 Corymbus, (461) a kind of Spike, whose Flowers are furnished with Foot-stalks, so proportioned to their situation, as to elevate all the Flowers of the Spike to the same Height.
- 477 Thyrsus, (489) a kind of crowded Panicle of an ovate Form.
- 478 Racemus, a bunch of Flowers, the Peduncles coming at the sides.
- 479 Simplex, undivided.
- 480 Compositus, divided into many.
- 481 Unilateralis, all the Flowers growing on one side.
- 482 Secundus, the Flowers all bending to one side.
- 483 Pedatus, (281) the Foot-stalk coming on one side like the Toes of the Feet.
- 484 Conjugatus, (278) joined by twos.
- 485 Erectus, (136) upright.
- 486 Laxus, (31) loose, not closely connected.
- 487 Nudus, (459) naked.
- 488 Foliatius, (56) leafy.
- 489 Panícula, Flowers scattered on Peduncles that are divided in different Forms.

- 490 Simplex, always few Flowers.
 491 Composita, many Florets coming together.

FRUCTIFICATIO, FRUCTIFICATION.

Temporary Parts of Vegetables called the Generation.

- 492 Calyx, a Flower Cup, is the termination of the outer Bark of the Plant, present in the Frustrification.
 493 Perianthium, a Flower Cup, whose Station is close to the Frustrification.
 494 Frustrificationis, when it includes the Stamina and Germen.
 495 Floris, containing the Stamina without the Germen.
 496 Fructus, containing the Germen without the Stamina.
 497 Proprium, without respect to the Flower.
 498 Monophyllum, consisting of one Leaf.
 499 Polyphyllum, consisting of many Leaves.
 500 2—5 Fidum, (183) divided into two, three, four, or five Divisions.
 501 2—5 Partitum, (186) divided almost to the Base from two to five.
 502 Integrum, entire, (171) undivided.
 503 Tubulosum, (262) tube shaped.
 504 Patens, (134) spreading.
 505 Reflexum, the Parts bent backwards.
 506 Inflatum, puffed out like a Bladder.
 507 Abbreviatum, shorter than the Tube of the Corolla.
 508 Obtusum, (205) the divisions rounded.
 509 Acutum, (210) the divisions sharp.
 510 Spinosum, (75) bearing Spines.
 511 Aculeatum, (244) bearing Prickles.
 512 Superum, when the Germen is below the Receptacle.
 513 Inferum, when the Germen is above the Receptacle.
 514 Commune, a common Calyx, containing many Florets, as in compound Flowers.
 515 Imbricatum, scaled, various scales lying over one another.
 516 Squarrosus, with scales pointing many ways.
 517 Scariosus, having scales; their Margins are membranaceous, hard, dry, and sounding when touched.
 518 Turbinatum, top-shaped, like an obverse Cone.
 519 Calyculatum, when a lesser Calyx is added, and encircles the Base of the larger one.
 520 Involucrum, a kind of Calyx standing remote from the Flower.

521 Universale,

- 521 Universale, in umbelliferous Plants, standing under the universal Umbel.
- 522 Partiale, an Invólucrum, standing under the partial Umbel.
- 523 Proprium, always under the Flower.
- 524 Gluma, a Husk, a Cup belonging to Grasses, whose Flowers it embraces with the Valves folded over.
- 525 Uniflora, when it embraces one Flower.
- 526 Multiflora, when it includes many Flowers.
- 527 Univalvis, when there is constantly but one Scale.
- 528 Bivalvis, when there are two Valves.
- 529 Multivalvis, when there are many Scales or more than two.
- 530 Colorata, (219) coloured.
- 531 Glabra, (216) smooth.
- 532 Hispida, (243) covered with hard Hairs.
- 533 Mutica, without Point, or Arista.
- 534 Arista, an Awl-shaped beard growing on the Husk.
- 535 Terminalis, terminating and fixed to the top of the Husk.
- 536 Dorsalis, fixed on the outside of the Husk.
- 537 Recta, growing perpendicular.
- 538 Tortilis, twisted.
- 539 Geniculata, (43) jointed.
- 540 Recurvata, (139) recurved.
- 541 Amentum, ex-Receptaculo, (635) a Catkin proceeding from a common Receptacle, resembling the Chaff of Corn.
- 542 Spatha, a Sheath, a kind of Cup bursting out lengthways.
- 543 Univalvis, of one Valve, opening on one Side.
- 544 Dimidiata, halved, the inner one covering the Fructification on one Side, and the outer one on the other.
- 545 Calyptra, a Veil, or Hood, covering the Antheræ, in Mosses.
- 546 Recta, straight, every where equal.
- 547 Obliqua, oblique, bent on one side.
- 548 Volva, a membranaceous Calyx belonging to the Fungi.
- 549 Approximata, close to the Head.
- 550 Remota, at some distance from the Head.
- 551 Corolla, the Termination of the inner Bark, present in the Flower.
- 552 Petalum, a Petal, a Part of the Corolla when divided into many.
- 553 Tubus, a Tube, the lower Part of a Flower with one Petal.

554 Unguis,

- 554 Unguis, a Claw, the lower part of a polypetalous Flower, by which it is fixed to the Receptacle.
- 555 Limbus, the upper part of a monopetalous Flower expanded.
- 556 Lamina, the upper spreading part of a polypetalous Flower.
Monopetala, vel Polypetala, &c. from one to many Petals, or according to the Number.
- 557 Regularis of an equal Figure, the Size of all the parts proportioned to one another.
- 558 Irregularis, when the Limb and other parts are disproportionate.
- 559 Inæqualis, when the different Sizes of the parts do not correspond but in proportion to one another.
- 560 Globosa, globe-shaped.
- 561 Campanulata, bell-shaped.
- 562 Infundibuliformis, funnel-shaped.
- 563 Rotata, wheel-shaped.
- 564 Hypocrateriformis, salver-shaped.
- 565 Ringens, gaping, irregular, with two Lips.
Galea, the upper Lip gaping.
Labium, instead of gaping, the lower Lip stands forwards.
- 566 Faux, the Jaws gaping between the Divisions of the Corollæ, where the Tube terminates.
- 567 Personata, (565) gaping, but shut between the Lips with a Palate.
- 568 Cruciata, having four equal spreading Petals.
- 569 Concava, (248) hollow.
- 570 Patens, (134) spreading.
- 571 Papilionacea, butterfly-shaped, irregular. *Carina*, the Keel, the lower Petal often in form of a boat. *Vexillum*, the Standard, or upper Petal ascending. *Alæ*, the Wings, standing single on each Side.
- 572 Composita, compound Flowers, having many Florets in a common perianthium, above the common Receptacle.
- 573 Ligulata, tongue-shaped, Florets whose Limb is plane, and expanded outward.
- 574 Tubulosa, Florets that are all tubular and equal.
- 575 Radiata, when the Florets are tubular in the Disk, and radiate and ligulate in the Margin.
- 576 Nectarium, Honey-pores, that part of the Flower bearing Honey.
- 577 Proprium, properly so called, as a distinct part from the Petal.
- 578 Petalinum, when inserted into the Petal.

- 579 Stamen, the male Organ of Generation furnished with a Viscus, designed for the Preparation of the Pollen.
- 580 Filamentum, Threads, the part that elevates, and is connected to the Antheræ.
- 581 *Æqualia*, equal, when they are all of an equal length.
- 582 *Inæqualia*, unequal, when some are long and others short.
- 583 Connata, when joined in one Body, but their Number, Figure, and Insertion expressed.
- 584 Anthera, that part of the Flower big with the Pollen, which it emits when come to maturity.
- 585 *Distinctæ*, not cohering.
- 586 *Connatæ*, joined by the Sides into one Body.
- 587 Pollen, Powder, of the Antheræ, destined for the Impregnation of the Germen, and bursting in a viscous Humour, into fine Atoms, is by a prolific blast scattered on the Stigma.
- 588 Pistillum, a viscous Humour adhering to the Fruit for the Reception of the Pollen, and is the female Organ of Generation.
- 589 Germen, the immature Rudiment of the Fruit within the Flower.
- 590 *Superum*, when included in the Corollæ.
- 591 *Inferum*, when below the Corollæ.
- 592 Stylus, that part of the Pistillum which elevates the Stigma from the Germen.
- 593 Stygma, the Female Uterus, at the top of the Pistil, furnished with a moist Humour.
- 594 Pericarpium, the Womb of the Plant big with the Seeds, which it emits when mature.
- 595 Capsula, a hollow Pericarpium, which cleaves or opens in some determinate Manner.
- 596 Valvula, an Opening, a Part of a Capsule, or outer Cover to the Fruit.
- 597 Loculamentum, a kind of arched Cell, for the Lodgement of the Seeds.
- 598 *Dissepimentum*, Partitions of the Fruit, which divide the Pericarpium into Cells.
- 599 *Bicapsularis*, two Capsules, *Tricapsularis*, &c. three Capsules, or according to the Number.
- 600 *Bilocularis*, &c. two Cells, &c. according to the Number.
- 601 *Tricocca*, a Capsule, with three protuberant Knobs, which divide into three Cells.
- 602 *Didyma*, a Capsule with two gibbous Knobs, which divide into two Cells.

603 *Siliqua*,

- 603 Siliqua, a Pericarpium of two Valves, in which the Seeds are fixed alternately to the opposite Sutures.
- 604 Compressa, flattened, the opposite Sides coming nearly together.
- 605 Torulosa, brawney Protuberances, when the Pericarpium is bunched out by the Seeds.
- 606 Articulata, interrupted by arched joints.
- 607 Parallelum Dissepimentum, the width, or diameter of the Dissepiment to which the Valves adhere.
- 608 Transversum, Dissepimentum, Dissepiments running cross-wise.
- 609 Legumen, a Pericarpium of two Valves, the Seed fixed to one Suture only.
- 610 Isthmus Interseptum, Pods, with various cross-divisions, forming distinct Cells.
- 611 Folliculus, a Pericarpium of one Valve, gaping length-wise on one Side, without the Seeds being fixed to the Suture.
- 612 Drupa, a pulpy Pericarpium, without Valves, containing a Stone or Nut (633).
- 613 Succulenta, containing a pulpy Humour.
- 614 Sicca, opposite to the foregoing, dry.
- 615 Pomum, an Apple, a fleshy Pericarpium without Valves, containing a Capsule.
- 616 Bacca, a Berry, a pulpy Pericarpium without Valves containing naked Seeds.
- 617 Nidulantia, Seeds nestling in the Pulp of a Berry.
- 618 Strobilus, a Pericarpium formed from an Amentum, with hard Scales lying over each other, as in the Pine tree.
- 619 Semen, Seed, the Rudiment of a new Plant; Seeds are known according to their Number, Figure, Superficies, and Consistence.
- 620 Hilum, the Eye, an external Scar of the Seed, where it has been fixed to the Fruit or Receptacle.
- 621 Corculum, the Essence of a new Plant within the Seed.
- 622 Plumula, Part of the Corculum, the ascending scaly part of the Plant.
- 623 Rostellum, the descending part of the Corculum that forms the Root.
- 624 Cotyledon, the side Lobes of the Seed of a Porous Substance, and perishing.
- 625 Corona, a Crown, a little Cup adhering to the top of the Seed, by which it flies.
- 626 Pappus, a downy feathered Cup, adhering to the top of the Seed by which it flies.

- 627 Stipitatus, a kind of thread-like Trunk, elevating the
Down, and connecting it with the seeds.
- 628 Capillaris, Hairs undivided.
- 629 Plumosus, having feathery hairs.
- 630 Cauda, a Thread terminating the Seed.
- 631 Hamus, a hooked Seed adhering to Animals.
- 632 Ala, a membranaceous Wing, fixed to the Seed.
- 633 Nux, a Nut, a Seed covered with a bony epidermis, hav-
ing one, two, or more Cells.
- 634 Arillus, the proper exterior Coat of a Seed that falls off
spontaneously, and is either cartilaginous, or succu-
lent.
- 635 Receptaculum, the Base, by which the parts of Fructifi-
cation are connected.
- 636 Commune, containing many Flowers and Fruit.
- 637 Punctatum, a Receptacle marked with hollow Punctures.
- 638 Pilosum (241) hairy.
- 639 Paleaceum, chaffy Scales which distinguish the Florets.
- 640 Planum (246) plain, a flat surface.
- 641 Convexum (249) the Disk elevated.
- 642 Conicum, cone-shaped, rounded and lessening towards
the Point.
- 643 Subulatum (269) Awl-shaped.
- 644 Compositus-flos, a compound Flower, with the Receptacle
spread out and entire, the Florets sessile.
- 645 Aggregatus-flos, an aggregate Flower, the Receptacle en-
larged, and the Florets on little Peduncles.
- 646 Umbella, an Umbel, a Receptacle which from a common
centre, runs out into thread-shaped Footstalks of pro-
portionate Lengths.
- 647 Simplex, when the Foot-stalks proceed from one and the
same Centre of the Receptacle.
- 648 Composita, when every Foot-stalk of the general Um-
bel produces a partial Umbel.
- 649 Universalis, composed of many simple Umbels.
- 650 Partialis, a little Umbel, a part supported by the Univer-
sal Umbel.
- 651 Prolifera, an Umbel more than decompound.
- 652 Cyma, a Receptacle producing many Foot-stalks from
the same Centre, that are of unequal Lengths, the par-
tial ones irregular on long fastigate Peduncles.
- 653 Rachis, a thread-shaped Receptacle, the Flowers adher-
ing to it length-wise, and forming a Spike.
- 654 Spadix, the Receptacle of a Palm, produced within a Spa-
tha or sheath, divided into branches that bear the Fruit.

655 Bulbus,

- 655 *Bulbus*, is an Hybernacle placed on the descending Cauldex, and contains the Rudiment of the Plant and Leaf that perishes.
- 656 *Solidus*; a solid fleshy Bulb, without any internal Divisions.
- 657 *Tunicatus*, Bulbs having Coats lying over each other like the Onion.
- 658 *Squamatus*, Bulbs consisting of imbricated Scales, as in the Lily.
- 659 *Caulinus*, Bulbs growing on the Stalk of the Plant.
- 660 *Gemma*, a bud, is an Hybernacle of the future Plant with its Leaves.
- 661 *Petiolaris*, inclosing the Rudiment of the Leaves.
- 662 *Stipularis*, inclosing the Stipula.
- 663 *Corticalis*, consisting of cortical Squamæ.
- 664 *Foliaris*, containing the Leaf and not the Flowers.
- 665 *Floralis*, containing the Flower and not the Leaf.
- 666 *Communis*, containing both the Leaf and the Flowers.
- 667 *Vernatio*, the Position of the Leaf within the Bud.
- 668 *Conducuplicata*, when the Parallel Sides of a Leaf approach.
- 669 *Convoluta*, rolled together in a spiral Form.
- 670 *Involuta*, rolled inwards spirally from the lateral Margins.
- 671 *Revoluta*, rolled spirally backwards from the lateral Margins.
- 672 *Obvoluta*, rolled together, one Margin embracing the other alternately.
- 673 *Equitantia*, when the Sides of the Leaves lie parallel, the outward one embracing the inner one.
- 674 *Imbricata*, a parallel straight Surface, lying over each other.
- 675 *Plicata*, plaited, when their Complication is in Plaits lengthways.
- 676 *Reclinata*, reclined, reflexed downward towards the Petiole.
- 677 *Spiralja*, spiral, twisted in transverse Plaits, so that the Apex becomes the Centre.
- 678 *Æstivatio*, the Complication of the Corollæ, before the unfolding of the Flower.
- 679 *Convoluta*, rolled together, (669).
- 680 *Imbricata*, (674) imbricate.
- 681 *Conducuplicata*, (668) when the parallel Sides of the Leaf approach.
- 682 *Valvata*, having Valves.

683 *Inæquivalvis*,

- 683 *Inæqualvis*, with unequal Valves.
 684 *Somnus*, Sleep, the Change that Leaves of Plants undergo in the night.
 685 *Connivens*, when the upper Disk of two opposite Leaves or Folioles are pressed together so as to appear one Leaf.
 686 *Includens*, when the Leaves are alternate, and in the Night press against the Stalk, so as to include it.
 687 *Circumseprens*, when Leaves growing in an horizontal Position, erect themselves in the Night, by clasping together in the form of a Funnel.
 688 *Muniens*, when the Leaves having Foot-stalks spreading horizontally, become dependent in form of an hollow Arch.
 689 *Conduplicans*, doubling, when the Folioles lightly approach each other with their upper Disk, so that both are covered.
 690 *Involvens*, when the Points of the upright Folioles are pressed together, and form a cavity between.
 691 *Divergens*, when the Base of the Folioles approach, and the Points are spreading.
 692 *Dependens*, when the Folioles hang downwards.
 693 *Invertens*, when the Folioles hang down, and are at the same time inverted.
 694 *Imbricans*, the Folioles imbricated, (120).

MENSURA, their MEASURE.

- 695 *Linearis*, linear, the twelfth part of an Inch.
 696 *Unguicularis*, the length of a Nail.
 697 *Policaris*, the length of the outward Joint of the Thumb.
 698 *Palmaris*, the width of the Hand.
 699 *Spithamæus*, a Span, the Length between the Point of the Thumb and fore Finger.
 700 *Dodrantalis*, nine Inches, the space between the Point of the Thumb and little Finger, when extended.
 701 *Pedalis*, a Foot, the Space from the bending of the Elbow to the Base of the Thumb.
 702 *Orgyialis*, a Fathom, or six Feet, the Height of a Man, or the Space between the extreme Points of the Fingers, when the Arms are extended.

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THE END.

